ublic Health Reports

Treasury Department, United States Marine-Hospital Service. Published in accordance with act of Congress approved February 15, 1893.

Vol. XIV.

Washington, D. C., March 10, 1899.

No. 10.

UNITED STATES.

ACT OF CONGRESS PROVIDING FOR THE INVESTIGATION OF LEPROSY IN THE UNITED STATES, ETC.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Supervising Surgeon-General of the Marine-Hospital Service, under the direction of the Secretary of the Treasury, shall appoint a commission of medical officers of the Marine-Hospital Service to investigate the origin and prevalence of leprosy in the United States, and to report upon what legislation is necessary for the prevention of the spread of this disease; the expenses of this investigation, not exceeding the sum of five thousand dollars, to be paid from the fund for preventing the spread of epidemic diseases.

Approved, March 2, 1899.

Following is the report of the Senate Committee on Public Health and Quarantine, submitted by Mr. Gallinger, January 18, 1898, recommending the passage of the bill.

REPORT.

[To accompany S. 2904.]

The Committee on Public Health and National Quarantine, to whom was referred the bill (S. 2904) for the investigation of leprosy, have examined the same and report:

The reasons for the proposed legislation are fully set forth in the following letter from the Supervising Surgeon-General of the Marine-

Hospital Service:

TREASURY DEPARTMENT, OFFICE SUPERVISING SURGEON-GENERAL MARINE-HOSPITAL SERVICE. Washington, D. C., January 13, 1898.

Hon. GEORGE G. VEST, Chairman Committee on Public Health and National Quarantine. United States Senate.

SIR: I have the honor to acknowledge the receipt of your letter of the 6th instant, referring to Senate bill No. 2904, with the request that I furnish your committee with 23

305

March 10, 1899 306

such suggestions as I may deem proper in the premises touching on the merits of the

bill and the propriety of its passage.

With regard to this bill, authorizing the Surgeon-General of the Marine-Hospital Service to cause an investigation to be made relative to the origin and prevalence of leprosy in the United States, I have to state that in view of the fact that leprosy is known to exist in quite a number of places in this country there is a prevailing opinion among the sanitary authorities that there are many more of these cases than have been recorded. Moreover, there has been a confusion of ideas about the danger of its spread. In one locality the disease is reported to be slowly spreading, and each year there are noted fresh foci of the disease, while, on the other hand, the reported isolated cases are a subject of discussion as to whether they are a menace.

So far there has been no systematic inquiry made with regard to the origin and prevalence of the disease in the United States. Some valuable reports have been made of the prevalence and behavior of this disease in one or two localities. Further than this the

information is imperfect and fragmentary.

That the disease is contagious no one at present will deny. The International Leprosy Conference, which met in Berlin in October last, declared that the disease is not only contagious, but when introduced into a country the history shows that it invariably spreads, each case forming a nidus of infection, and sooner or later other cases followed. This fact has been recognized by a few of the State and local authorities where there was a considerable number of cases, and restrictive measures are now enforced to prevent its further spread. In many places from which isolated cases have been reported no such measures have been generally practiced. The Marine-Hospital Service has been notified of the existence of such cases and has been requested to assume charge of them, and when it was ascertained that there was no law for such procedure these cases have been turned adrift to go wherever they pleased.

In this connection I would state that it is believed that there are many more cases of leprosy in the United States than are actually known. Recent investigation and study of the disease have demonstrated that there are quite a number of obscure forms of nervous and skin diseases which heretofore considered as separate and distinct are

nothing more or less than leprosy.

Before any rational measures can be undertaken by the National Government, if such a conclusion is justifiable, it will be necessary to inquire further into the origin and prevalence of the disease, and to determine just how far it is a menace to our people.

The expenses of such an inquiry would be small; a sum sufficient to meet the expenses of travel of the officers detailed to this duty would be all that is required. This could be properly paid from the fund for the prevention of epidemic diseases.

The bill meets with approval, and I would respectfully recommend that favorable

action be taken thereon.

Respectfully, yours,

WALTER WYMAN, Supervising Surgeon-General, Marine-Hospital Service.

Approved:

L. J. GAGE, Secretary.

Your committee recommend the passage of the bill.

[Reports to the Supervising Surgeon-General, United States Marine-Hospital Service.]

PORTO RICO.

Report of inspection of Arecibo.

SAN JUAN, PORTO RICO, February 16, 1899.

SIR: I have the honor to make the following report of an inspection of Arecibo, Porto Rico.

This port is situated 36 miles by water, and about 50 miles by rail, west of San Juan, upon an open arm of the sea, which affords no protection to vessels in case of storms.

The population of the city is given at 9,000, and the district 26,000. The usual cistern and cesspool system prevails, and the place compares favorably in appearance with our own Gulf port towns. Vessels anchor in the open roadstead, and passengers and cargoes are lightered

ashore in a roundabout way up the Rio Grande or Santiago River, a small stream with numerous bars. The usual Spanish records are carefully and systematically kept, so far as appearances go. From the local non-English speaking collector of customs, the following shipping data were obtained:

Number of vessels arrived in the calendar year 1893, 59; 1894, 62;

1895, 27; 1896, 86; 1897, 88; 1898, 54.

The majority of these vessels are first inspected at the capital, San Juan, and those coming direct are from our northern ports, with salt cod, etc., returning with coffee and sugar to the ports of Boston and New York. Arecibo, therefore, from the water side, may be considered safe, in a sanitary point of view.

Dr. Fernando Aleman, 41 years of age, born in Matanzas, Cuba, has been port physician for the past six years. He speaks no English, and receives a salary of 21 pesos a month, which he considers too small for

the little duty performed.

In the months of August and September, 1893, there were 20 cases of yellow fever and 10 deaths, confined to the new Spanish residents of a year or so. The local opinion is that this disease prevails endemically when new material is present. A fact, however, which they overlooked, and which I pointed out, was that this disease existed in San Juan the same year; the local French railroad was completed and placed in operation between the two places the year before, and may have been the carrier of the infection. A case or two of smallpox was discovered in the district lately, isolation practiced, with no further spread. headquarters of the Sixth Immune United States Infantry is located here with companies stationed at near by points. I was told by their medical officers that out of 200 vaccinations made not one afforded pro-This vaccine virus is supplied from New York, and there is something at fault in its preparation or care. The Sixth Immune Volunteer Infantry is now being embarked on board the transport steamer Chester for mustering out at Savannah, Ga. Through the courtesy of Colonel Tyson, I obtained the following vital statistics in the local court.

The total number of deaths (de defuncion) for the calendar year were as follows: 1893, 887; 1894, 965; 1895, 871; 1896, 962; 1897, 969; 1898, 1,269. These figures were ascertained by making the additions, a matter of wonder and curiosity to the local officials. There appeared to be no special prevalence of contagious or infectious disease, the death rate in the yellow fever year, 1893, being no greater, but last year considerably higher than usual. Taking the average number of deaths for the five years, and their own estimate of 26,000 population to the district, the average death rate is 45.7 per thousand.

Like other cities and districts upon this island, a space of a few weeks is allowed in which to make the reports of births. For this reason many stillbirths are not recorded, and possibly others dying within the

first week or two.

The record of births (nacimientos) is as follows: Year 1893, 1,116; 1894, 1,034; 1895, 1,069; 1896, 1,131; 1897, 1,087; 1898, 847. The number of births appears to have decreased, and the number of deaths increased during the year of the war, for no explainable reason.

I inclose a copy of the bill of health which I found in use here, also

copies of the permanent birth and death records.

Respectfully submitted,

A. H. GLENNAN, Surgeon, U. S. M. H. S.

The Supervising Surgeon-General,

[Inclosure No. 1.]

ARECIBO, PORTO RICO. To all to whom these presents shall come: is now ready to depart from the port of Arecibo — — , of which — the sea, with — — - is master, -, and other places beyond - — persons, including the master of the said vessel: other dangerous or contagious disease, in an epidemic form, at present exists in the said port. Given under our hand and seal of office, this ---- day of ---FERNANDO ALEMAN, Sanitary Physician of the Port. - —, Deputy Collector of Customs.

Measles, cerebro-spinal meningitis, and la grippe in Mobile, Ala.

MOBILE, ALA., March 3, 1899.

SIR: I have the honor to state that measles was brought to this town by the volunteers in June, and has prevailed more or less since; the disease has gone all over the city. Last week a death was reported as caused by pneumonia following an attack of measles. It is probable that other deaths primarily due to measles have been recorded under the final cause of death.

There have been 3 deaths from cerebro-spinal meningitis within the past week, 2 of them reported under other names (I witnessed a necropsy on the the third case). There are other cases. No common cause except inclement weather is known.

The disease prevails in Lauderdale County, Ala., and there have been several fatal cases.

During the past month 4 death reports with la grippe solo, or as a complication, have been reported. Some physicians claim to have treated the disease, while others say they have not seen it. The disease has not been very prevalent, if it has existed here.

Respectfully, yours,

R.

R. D. MURRAY, Surgeon, U.S. M. H.S.

Smallpox in the United States.

ALABAMA.

Mobile.—Surgeon Murray reports, March 3, 1 case of smallpox sent to the pesthouse on February 25. He came from Clarke County. Several cases were reported from Hinds County, Miss.

CALIFORNIA.

Los Angeles, Cal., March 2, 1899.

SIR: I have the honor to report that the first case of smallpox which occurred in this city for many months was a case of varioloid in September, 1898, the source of infection in this case is supposed to have been New Mexico. The second case reported was in a tourist from New Mexico on November 26, 1898; and the third case in the person of the wife of the attending physician upon the tourist. On December 27, 1898, the fourth case of smallpox was reported existing in the extreme southern limits of the city, the source of infection supposed to have been tramps from Arizona. This case was quarantined at the patient's residence. On January 16, 1899, a case was reported to the office which

had been concealed in a densely populated portion of the city since January 4, in a family owning a grocery store, who had conducted their business during the several days' illness of their brother. The source of infection of this latter case was from the one reported on December 27.

This will show you the cases reported, weeks ending as follows:

Week ended January 7, 1 case of variola, 1 case of varioloid; week ended January 14, 1 case of variola; week ended January 21, 1 case of variola, 1 case of varioloid, 1 death; week ended January 28, 1 case of variola; week ended February 4, 20 cases of variola, 3 cases of varioloid, 2 deaths; week ended February 11, 2 cases of variola, 2 cases of varioloid, 2 deaths; week ended February 18, 2 cases of variola, 5 cases of varioloid, 4 deaths; week ended February 25, 6 cases of variola, 3 cases of varioloid, 1 death.

We have removed all cases to the smallpox hospital that we could induce to go, others we have quarantined at their residences by placarding and flagging, and placing police officers at the residences, preventing any person from going in or out excepting by permission of the

board of health.

I will make a weekly report as per request after this, now that I have received your blanks.

Respectfully,

L. M. POWERS, M. D., Health Officer, Los Angeles.

San Diego.—Assistant Surgeon Cooper reports, February 25, no further cases of smallpox since the death on the 19th of the only case. Origin of this case, Los Angeles. Eight suspects were vaccinated and isolated.

DISTRICT OF COLUMBIA.

Washington.—Dr. Woodward, health officer, reports as follows: March 2. Two new cases since March 1, 5 discharges, and 1 house released from quarantine. March 4. Two new cases since the 2d, 2 suspects, and 1 house released from quarantine. March 6. One new case since the 4th and 1 suspect.

GEORGIA.

Savannah.—Assistant Surgeon Foster reports, March 2, 1 new case of smallpox and 1 suspect; probable origin North Carolina and unconnected with the first case.

ILLINOIS.

Dr. J. N. Egan, secretary of the State board of health, reports March 7 as follows:

Biggsville, Henderson County.—One case.

Cairo, Alexander County.—Twenty-six cases.

Dana, La Salle County.—One case.

Murphysboro, Jackson County.—Two cases. All precautions taken as to vaccination and quarantine.

INDIANA.

Evansville.—Passed Assistant Surgeon Oakley reports, March 3, 1 new case.

March 10, 1899 310

MICHIGAN.

Berrien County.—Dr. Henry Baker, secretary of the State board of health, reports, March 2, 1 case of smallpox in Watervliet Township. Origin, probably from paper rags in paper mill where patient was employed.

Detroit.—Dr. Campbell, city health officer, reports March 7 that

Detroit is free from smallpox and has been since February 17.

NORTH CAROLINA.

Burlington.—On request of Dr. Lewis, secretary of the State board of health of North Carolina, to send a smallpox expert, Passed Assistant Surgeon Pettus was directed to proceed to Burlington, N. C., to decide diagnosis in a case suspected of being smallpox, consulting with Superintendent of Health Goley. He reports as follows:

Burlington, N. C., March 1, 1899.

SIR: According to your telegraphic orders of yesterday, I have the honor to report that I arrived at this place by the first train at 6 o'clock this morning, and as soon as possible visited the 2 suspects with the county superintendent of health, Dr. W. R. Goley. The first case seen was a white man named Hurley, a workman in the cotton mills here, and I found him sick with smallpox in the fifteenth day of the disease. next case was also a mill workman, living in the adjoining house, a young white man, who had a mild case of varioloid. The other case, also a white man, working at the same mill, died yesterday morning, and was buried last night. From the clinical history obtained from his attending physician, I should say it was a case of confluent smallpox. Two other cases seen were not suspicious enough to warrant mention. The source of the contagion has not been discovered, unless it came from the cotton handled by these cases while working at their trades. house-to-house vaccination will be begun at once, and a pesthouse has already been selected for the isolation of the sick, and another one for the detention of suspects.

Very respectfully,

W. J. PETTUS,
Passed Assistant Surgeon, U. S. M. H. S.

OKLAHOMA TERRITORY.

GUTHRIE, OKLA., March 4, 1899.

SIR: I have the honor to report the following in reference to the late

smallpox epidemic in Oklahoma:

First case occurred November 30, 1898; the last convalescent, January 30, 1899. The cases were confined to Lincoln County, in and near the towns of Stroud and Chandler. Thirty-two cases were reported, with 10 deaths. A most significant condition occurred in connection with this epidemic. Of the 22 cases which recovered, every case had been vaccinated; of the 10 cases which died, there was no record in any instance of any one of them having been vaccinated. In other words, every vaccinated case terminated in recovery, and every unvaccinated in death. The form of the disease was exceedingly virulent, hemorrhagic or confluent, which accounts for a great percentage of deaths. The disease extended into the Indian Territory on the east, and nearly 50 deaths have been reported to me from that section.

Considering the malignancy of the disease and the number exposed

in the early part of the epidemic, we consider ourselves fortunate in having stamped out the epidemic in so short a time as sixty days. The 22 cases that recovered were strictly cases of varioloid, though many of them assumed, and were in fact, typical cases of smallpox.

Very respectfully, L. HAYNES BUXTON.

PORTO RICO.

San Juan.—Surgeon Glennan telegraphs, March 6, 3 cases of smallpox.

SOUTH CAROLINA.

Horry County.—Acting Assistant Surgeon Bailey reports, March 8, 10 or more cases of smallpox in Horry County, 40 miles from Georgetown.

TEXAS.

EAGLE PASS, TEX., February 25, 1899.

SIR: Since my last report I have the honor to inform you that no new cases of smallpox have developed in C. P. Diaz, Mexico (old Piedras Negras).

Regarding the old cases, I will state that they are convalescent, and no avenue has been left open by means of which the disease might spread through this focus of infection, as the Mexican authorities have isolated every case, disinfected the rooms and houses where the disease first broke out, and now have guards stationed around the hospital where the patients are confined.

I have one Marine-Hospital Service guard stationed on the Rio Grande just opposite the Mexican town of Mokal, this guard patrolling the river for a distance of 10 miles, and allowing no one to cross the fords in his territory. The custom inspectors of Eagle Pass and Del Rio are aiding me in keeping out the disease, and I feel sure that no case will get to this side. Every person coming into the United States is thoroughly examined, and everything is being done to prevent the entrance of smallpox, or any other contagious disease.

I have the honor to remain, respectfully, yours,

LEA HUME, Acting Assistant Surgeon, U. S. M. H. S.

LAREDO, TEX., February 26, 1899.

SIR: I acknowledge receipt of 6 copies of "Précis upon Smallpox." I will not require any more at present. One was marked as to disinfection of mail. I spoke to the postmaster regarding the disinfection. He seemed to think it unnecessary to disinfect mail as the persons afflicted with smallpox here do not write letters; he, as yet, has not disinfected any mail matter.

I inclose weekly report of smallpox at this port, also report of Marine-Hospital Service inspectors at International Foot and Tramway Bridge. I also send you corrected report of smallpox at Laredo, Tex., January 1, 1899, to and including February 25, 1899, as I noticed errors in Public Health Reports. (Correct report 376 cases and 83 deaths between above named dates.)

The large proportion of deaths are for the following reasons: First, the Mexicans do not employ, nor will they permit, a physician to take charge and treat them properly; second, deaths among very young children when from no visible cause and not attended by a physician

are considered as smallpox and the necessary certificate reads accord-

ingly so that precautions can be used, no public funerals, etc.

Week ended February 19-25. Returned for refusal to allow vaccination, 4; returned paupers, blind and crippled, 3; vaccinated and allowed to enter, 49; examined and allowed entry as immunes or recently vaccinated, 3,435; total examined, 3,491.

January 1-7, 13 cases, 6 deaths; January 8-14, 59 cases, 5 deaths; January 15-21, 37 cases, 8 deaths; January 22-28, 44 cases, 9 deaths; January 29-February 4, 69 cases, 14 deaths; February 5-11, 42 cases, 16 deaths; February 12-18, 46 cases, 15 deaths; February 19-25, 66 cases, 10 deaths; total, 376 cases, 83 deaths.

Respectfully, yours,

Acting Assistant Surgeon, U. S. M. H. S.

VIRGINIA.

Alexandria.—Sanitary Inspector Snowden reports as follows: February 28, 2 deaths, no new cases. March 1, 2 new cases. March 3, 3 new cases. March 4, 3 new cases. March 5, 1 new case. March 6, 2 new cases, 2 suspects. March 7, 1 new case. March 8, no new cases.

Norfolk.—Passed Assistant Smith reports as follows: March 1, new cases, 13, discharged, 1. March 2, new cases, 7, discharged, 4. March 3, new cases, 4, discharged, 1. March 4, new cases, 6, no discharges. March 5, new cases, 3, discharges, 11. March 6, new cases, 7, discharges, 25. March 7, new cases, 4, discharges, 12.

Portsmouth.—Dr. F. S. Hope, city health officer, reports for the week ended March 4, 44 new cases of smallpox, white, 5, colored, 39.

WISCONSIN.

Outagamie County.—Dr. Wingale, secretary of the State board of health reports February 28, 11 cases of smallpox in Appleton, 1 death, and 1 case in adjoining town of Harrison. All originated from rags in paper mill.

Smallpox in the United States as reported to the Supervising Surgeon-General United States Marine-Hospital Service, December 31, 1898, to March 10, 1899.

Places.	Date.	Cases.	Deaths.	Remarks.
labama:				
Antauga County				Smallpox reported.
Calvert	Dec. 10-Jan. 20	10		_
Catherina	Jan. 6			Do.
Clarke County	Dec. 25-Jan. 20		2	Several cases.
Clay County	Jan. 27			Smallpox reported.
Collerine		1		1
Dallas County	Jan: 27			Do.
Green County	do			Do.
Hale County	do			Do.
Lowndes County	do	l		Do.
Marengo County	do			Do.
Mobile	Jan. 2-Feb. 25	14		•
Montgomery County	Feb. 24	l		Do.
Randolph County	Jan. 27			Do.
Southside	Jan. 6	96		
Washington County	Jan. 27			Do.
Wilcox County	do	l		Do.
rkansas:				
Pulaski County	Jan. 27-Mar. 1	8	1	
alifornia:				
Los Angeles	SeptFeb. 25	54	10	
Sacramento City	do	1		
San Diego	Feb. 19	1	1	
San Francisco	Jan. 31	2		

. Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Zolorado :				
Arapahoe County	Dec. 1-Feb. 8	23		
El Paso County				•
Fremont County	Dec. 1-Jan. 31	. 24		
Los Animas County		12		
Pueblo County	Dec. 17-Jan. 31	60	4	
Connecticut:	T 10		1	
New Haven	Jan. 16	2		1
District of Columbia:	T 01 35 0		1	1 .
Washington	Jan. 21-Mar. 6	39		-{
lorida:	E-1 10 E-1 10		1	1 -
Jacksonville	Feb. 12-Feb. 18	. 1		•
Key West	Feb. 25	. 3		
Pensacola	Jan. 14	. 1		•
leorgia:	T 1 T 10	. 300		
Jones County	Jan. 1-Jan. 16			
Savannah	Feb. 22-Mar. 2	2		•
llinois:	l	1		
Bethel	Jan. 7			
Biggsville, Henderson Co	Mar. 7	- 1	 	
Cairo	Feb. 23-Mar. 7	. 26		
Dana, La Salle County	Mar. 7 Jan. 7	. 1		
Media	Jan. 7	. 1		
Monmouth, Warren County	Feb. 23	. 4		
Murphysboro, Jackson Co	Mar. 7	. 2		.[
ndiana:		1		1
Dana	Feb. 8	. 1		1
Evansville	Feb. 7-Mar. 3	.[3		.}
Indianapolis	Jan. 25-Feb. 11			
Jackson City	Feb. 24			1
Sullivan County	Feb. 11			į.
Toronto	Feb. 4	. 1		į
dian Territory	Mar. 4		45	1
owa:		ĺ	į	
Lee County	Jan 13		1	
Wayne County	do	. 1		
ansas:				
Marion County	Jan. 17	. 11		
Peabody	Feb. 1-Feb. 16	56	7	
entucky:	1 001 1 1 00. 10		•	i
Louisville.	Dec. 20-Mar, 2	157		
ouisiana:	Dec. 20 Mar. 2	10.	•••••	
New Orleans	Jan. 30-Feb. 25	9		
sine:	000000000000000000000000000000000000000			
Auburn	Feb. 20	4		
Lewiston	Feb. 22-Mar. 4			
aryland:	2 00. 22 12.01. 1			
Baltimore	Feb. 22-Mar 4	3		
Cumberland				
Pocomoke	do	3		
ichigan:				
Detroit	Jan. 1-Feb. 4	14		
innesota:	Jan. 1-1 ed. 4	12	•••••	
Minneapolis	Dec. 8	1		
ississippi:	Dec. 6	-		
Clay County	Jan. 27			Smallpox reported.
Hinds County	Mar 2			Do.
Jones County	Jan 27	••••••		Do.
Jones County. Lauderdale County Noxubee County Perry County.	do	•••••	•••••	Do. Do.
Noxubee County	do	•••••		Do. Do.
Perry County	do	17	••••••	20.
Perry County Tisbomingo County	do			Do.
issouri:				20.
Carroll County	Feb 13	33	5	
St. Louis	Nov. 1-Jan. 21	15	2	
ebraska:		-0	- !	
	July 1-Dec. 8	153		
	Dec. 9-Jan. 16	147	3	
Omaha	Jan. 1-Feb. 25	33		
	Jan. 1-Jan. 16	21		
	Jan. 2	5		
	Dec. 10	ĭ		
	Jan. 2	9		
ew Jersey:	·	٠,		
	Dec. 5-Jan. 22	6		
ew York:	200.0 0011. 24	"		
	Jan. 7-Mar. 4	10	2	
	Jan. 8-Jan. 21	5	2	
Dunkirk				
Dunkirk	Jan. 6-Jan. 21	١,	i	
orth Carolina :	Į.	. 1	,	
orth Carolina: Burlington, Franklin Co	March 1 Feb. 16	3 2	1	

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.		
North Carolina—Continued.						
Edgecombe County	Feb. 1	24		.[
Gates County	do	1		.]		
Northampton County	Jan. 12	1		.		
Wilmington	Feb. 3	1		1		
Ohio:		_		1		
Brooklyn	Feb. 7-Feb. 27 Jan. 23-Feb. 27 Dec. 25-Feb. 27	1 1				
Cincinnati	Jan. 23-Feb. 27	145	2			
Cleveland	Dec. 25-Feb. 27	32				
Columbus	Feb. 7-Feb. 27	71		1		
Dialton	do	1 2				
Franklin		1 2		İ		
Gallipolis	Feb. 26 Feb. 7-Feb. 27	2 2				
Sandusky Shenandoah	reb. 7-reb. 27	1				
		i				
South Charleston Sunbury		3				
Toledo	do	i				
Wellington	do	i				
Willoughby	do	l i				
Oklahoma :						
Chandler	Dec. 30	1	l			
Doggett	do	l î				
Lincoln County	Nov. 30-Jan. 30	32	10			
Parkland	Dec. 30	1				
Sac and Fox Agency	do	2				
Stroud	do		3			
Pennsylvania:			1			
Altoona	Jan. 1-Mar. 4	3				
Ball Hill	Dec. 31-Jan. 23	1				
Bedford County	Dec. 31-Feb. 11	5				
Brumbaugh	do	2				
Charlesville	Dec. 31	15		Smallpox reported.		
Claysburg	Dec. 31–Jan. 23	1				
East Vincent Township	Dec. 31	1				
Everett	do	3				
Homer City	do	2				
Hopewell	do	3				
Hustontown	do	4				
New Granada	do Dec. 31-Feb. 11	7				
Philadelphia	Dec. 31-Feb. 11	10				
Pittsburg	Dec. 31-Feb. 25	2				
Steelton	do	11				
Waterfall Porto Rico:	do	1				
Ponce	Tom 17 Web 07	400				
	Jan. 17-Feb. 27					
San Juan Shode Island :	Mar. 6	3	••••••			
Providence	Feb. 21	1				
South Carolina:	I 00. 41	- 1	•••••			
Horry County	Mar. 8	10				
Cennessee:		10				
Jackson	Feb. 18	9				
Madison County	Feb. 21	í				
Memphis	Feb. 18	6				
exas:		•				
Alice, Nueces County	Feb. 20	20				
Brownsville	Jan. 7					
Brownsville El Paso	Aug. 1-Dec. 31	45		Year 1898.		
	Jan. 1-Jan. 18	21				
Laredo	Jan. 1-Feb. 25	376	83			
San Rafael	Jan 29					
irginia :			ŀ			
Alexandria	Jan. 4-Mar. 8	294	2			
Hampton	Reb 15	6				
Newport News	Dec. 31	4				
Norfolk	Sept. 19-Mar. 7 Dec. 31-Mar. 4	487	4			
Portsmouth	Dec. 31-Mar. 4	96				
Richmond	Jan. 25-Feb. 18	3				
Visconsin:	T. 10	_	!			
Calumet County	Feb. 16	1				
Harrison County	Feb. 20	.1				
Outagamie County	Feb. 7-Feb. 28	11	1			
7						
Vyoming: Rock Springs	Dec. 24					

Report of immigration at New York for the week ended February 28, 1899.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION, Port of New York, February 28, 1899.

Number of alien immigrants who arrived at this port during the week ended February 28, 1899; also names of vessels and ports from which they came.

Date.	Vessel.	Where from,	No. of immigrants.
Feb. 19	Steamship Campania	Liverpool and Queenstown	170
Do		Antwerp	153
Do			326
Do		Glasgow	1
Feb. 20	Steamship St. Paul		106
Do			
Feb. 21	Steamship Patria	Hamburg	461
Feb. 23	Steamship Furnessia	Glasgow	68
Do			
Do	Steamship Ems		
Do	Steamship Amsterdam	Rotterdam	123
_ Do		Genoa and Naples	665
Feb. 24	Steamship Sempione	do	307
<u>D</u> o			319
_ Do			
Feb. 25	Steamship Weimar		282
Do			60
Do			108
Do			287
Do	Steamship St. Louis	Southampton	144
	Total		4, 787

THOMAS FITCHIE, Commissioner.

Report of immigration at Boston for the week ended March 4, 1899.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION, Port of Boston, March 5, 1899.

Number of alien immigrants who arrived at this port during the week ended March 4, 1899; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants	
Feb. 26 Feb. 27 Mar. 1 Do Mar. 2 Do Mar. 3 Do Mar. 4	Steamship Grand Lake Steamship Halifax Steamship Boston Steamship Scandinavian Steamship Scandinavian Steamship Prince George Steamship Ottoman Steamship Cambrian	London, England Liverpool, England St. Johns, New Brunswick Halifax, Nova Scotia Yarmouth, Nova Scotia. Glasgow, Scotland Yarmouth, Nova Scotia. Liverpool, England	6 25 12 20 55 9 30 22	

GEORGE B. BILLINGS, Commissioner.

Report of immigration at New York for the week ended March 4, 1899.

Office of U. S. Commissioner of Immigration, Port of New York, March 7, 1899.

Number of alien immigrants who arrived at this port during the week ended March 4, 1899; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Feb. 26	Steamship Galileo	Rio de Janeiro	2
Do Do	Steamship Umbria	Liverpool and Queenstown	
Feb. 28 Do	Steamship La Normandie Steamship Friesland	Antwerp	18
Mar. 1 Mar. 2	Steamship Southwark Steamship Albano		26 12
Do		Liverpool and Queenstown	15 45
Mar. 3 Mar. 4	Steamship PennsylvaniaSteamship Werkendam	Hamburg	91 22
Do	Steamship Assyrian	Glasgow	1 35
Do	Steamship Alsatia	Liverpool and Queenstown Naples	23
Do Do		Naples and Gibraltar Bremen	42 28
	Total		4,74

THOMAS FITCHIE, Commissioner.

Report of immigration at Philadelphia for the week ended March 4, 1899.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION, Port of Philadelphia, March 4, 1899.

Number of alien immigrants who arrived at this port during the week ended March 4, 1899; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Mar. 1 Mar. 2	Steamship AstrakhanSteamship Russia		2 86 88

JNO. J. S. RODGERS, Commissioner.

Immigration report for the month of February, 1899, at Baltimore, Md.

BALTIMORE, MD., March 1, 1899.

SIR: I have the honor to report that there were 670 immigrants inspected at this port during the month of February, and none rejected.

Respectfully, yours,

GEO. PURVIANCE,

Surgeon, U. S. M. H. S.

REPORTS FROM NATIONAL QUARANTINE

Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
Alexandria, VaBeaufort, N. CBrunswick, Ga.	do	Swed. bk. Adele Br. bk. Margaret Mitchell	Feb. 28	Riodo
Cape Charles, Va	Feb. 25 do Feb. 18 Mar. 4 Feb. 25 Mar. 4 Feb. 25 Mar. 4	Br.sc. Utility	Feb. 27 Mar. 3	Havanado
South Atlantic Quarantine, Blackbeard Island, Ga. Tortugas Quarantine, Key West, Fla. Washington, N. C	do.,			

REPORTS FROM STATE AND

Name of station.	Week ended.	Name of vessel.	Date of arrival	Port of departure.
Anclote, Fla Baltimore, Md Bangor, Me Boston, Mass Carrabelle, Fla Charleston, S. C Charlotte Harbor, Fla Elizabeth River, Va	do do do			
Galveston, Tex	dododododo			

AND INSPECTION STATIONS.

Destination.	Treatment of vessel, passengers, and cargo.	Date of depar- ture.	Remarks.	Vessels inspected and passed.
			No report	
1	Ballast discharged at quarantine.	!		11
do	Discharging ballast Ballast discharged and held for observation.			
	Ballast and dunnage dis- infected and passed.	Mar. 1	No transactions	1
do	do	Mar. 4		5
			No transactions	
	••••••			4 20
	Not admitted to free pra-		No report	12
	tique on account of com- ing from Havana, but as she was fairly clean, with no sickness on board, she was permitted to land 8 passengers and take on food and a few passen- gers.			
	••••••		No transactions	16
	•••••••••••••	•••••	do	•••••
	••••••		do	••••••

MUNICIPAL QUARANTINE STATIONS.

Destination.	Treatment of vessel, passengers, and cargo.	Date of depar- ture.	Remarks.	Vessels inspected and passed.
			No reportdo	
	***************************************		do	
			dodo	
				4
Norfolk	Disinfected and fumigated; smallpox case sent to Nor- folk pesthouse; crew vac- cinated.	Mar. 5	No report	••••••
••••••	***************************************		No report	
	•••••		do	1
••••••	••••••		No transactions	
	•••••		No report	11
••••••	•••••		No report	5
	***************************************		do	
•••••••			No transactions	
				3
	***************************************		do	
••••••••••••		······	do	

Reports of States and yearly and monthly reports of cities of the United States.

CONNECTICUT—Westport.—Month of February, 1899. Estimated population, 4,000. Total number of deaths 10, including scarlet fever, 1, and 1 from phthisis pulmonalis.

GEORGIA—Columbus.—Month of February, 1899. Estimated population, 19,303; white, 10,276; colored, 9,027. Total number of deaths, 20; white, 8; colored, 12, including la grippe, 5, and 4 from phthisis pulmonalis.

HAWAII—Honolulu.—Month of January, 1899. Estimated population, 30,000. Total number of deaths, 93, including enteric fever, 1, and 10 from phthisis pulmonalis.

ILLINOIS—Chicago.—Month of January, 1899. Estimated population, 1,650,000. Total number of deaths, 2,498, including diphtheria, 82; enteric fever, 44; influenza, 113; measles, 3; scarlet fever, 26; whooping cough, 2, and 237 from phthisis pulmonalis.

Springfield.—Month of February, 1899. Estimated population, 24,963. Total number of deaths, 55, including diphtheria, 1; la grippe, 2, and 8 from phthisis pulmonalis.

IOWA—Boone.—Month of January, 1899. Estimated population, 6,520. Total number of deaths, 7, including 2 from la grippe and 1 from phthisis pulmonalis.

Burlington.—Estimated population, 30,000. Total number of deaths, 52, including enteric fever, 1; la grippe, 5; measles, 5, and 5 from phthisis pulmonalis.

Carroll.—Estimated population, 3,000. Total number of deaths, 2. Cedar Falls.—Estimated population, 6,000. Total number of deaths, 10, including 2 from la grippe.

Cedar Rapids.—Estimated population, 27,000. Total number of deaths, 29, including la grippe, 4, and 2 from phthisis pulmonalis.

Davenport.—Estimated population, 36,000. Total number of deaths, 67, including diphtheria, 1; enteric fever, 1, and 10 from phthisis pulmonalis.

Des Moines.—Estimated population, 72,000. Total number of deaths, 67, including diphtheria, 1; la grippe, 7; measles, 1, and 2 from phthisis pulmonalis.

Eldon.—Census population, 1,725. Total number of deaths, 2, including 2 from phthisis pulmonalis.

Fairfield.—Census population, 3,391. Total number of deaths, 5.

Indianola.—Estimated population, 2,254. Total number of deaths, 3, including 1 from la grippe.

Keokuk.—Estimated population, 19,305. Total number of deaths, 19, including 1 from la grippe and 2 from phthisis pulmonalis.

Keosauqua,—Estimated population, 1,500. Total number of deaths, 3, including 2 from la grippe.

Marengo.—Estimated population, 2,500. Total number of deaths, 6, including 2 from la grippe.

Marion.—Census population, 3,984. Total number of deaths, 5.

Nevada.—Estimated population, 2,500. Total number of deaths, 3.

Osage.—Estimated population, 3,200. Total number of deaths, 4.

Sibley.—Estimated population, 1,500. Total number of deaths, 5, including 3 from la grippe.

Sioux City.—Estimated population, 37,000. Total number of deaths, 34, including 3 from la grippe.

The following infectious diseases were reported to the secretary during the month of January:

Diphtheria: Neola; Clinton Township, Ringgold County; Roland Township, Webster County; Persia; Alta; New Providence; Colfax Township, Boone County; Pleasant Township, Lucas County; Ames; Kniest Township, Carroll County; Polk Township, Shelby County; Cedar Falls; Davenport.

Scarlet fever: French Creek Township, Allamakee County; Wilton Junction; West Chester; Clinton Township, Ringgold County; Farragut; Rowles Township, Mills County; Hopkington.

Typhoid fever: Fulton Township, Webster County; Sioux City; Burlington; Davenport.

Whooping cough: Madrid; Sioux City.

Measles: Oakland, Madrid, Cumberland, Hopkinton, North Branch, Woodbine, Eldon, Knoxville, Shenandoah, Zearing, Des Moines.

Smallpox: Percival; West Point; Seymour; Franklin Township, Appanoose County; Clio; Audubon.

MASSACHUSETTS—Holyoke.—Month of February, 1899. Estimated population, 44,982. Total number of deaths 51, including diphtheria, 1; influenza, 3; whooping cough, 1, and 6 from phthisis pulmonalis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended February 25, 1899, from 63 observers, indicate that intermittent fever increased and inflammation of kidney decreased in area of prevalence. Phthisis pulmonalis was reported present at 103, scarlet fever at 47, measles at 36, diphtheria at 22, enteric fever at 20, whooping cough at 12 places, and alleged smallpox at 1 place—Watervliet Township.

NEW YORK.—Reports to the State board of health, Albany, for the month of January from 146 cities, towns, and villages, having an aggregate population of 7,110,000, show a total of 12,421 deaths, including diphtheria, 255; enteric fever, 111; measles, 51; scarlet fever, 71; smallpox, 1; whooping cough, 77, and 1,304 from phthisis pulmonalis.

The Monthly Bulletin says:

There were 12,421 deaths reported during January, an average daily rate of 400, against 350 in December; the number of deaths exceeds that of January, 1898, by 2,800. Common epidemic diseases caused 800 deaths, against 765 in December, and 900 in January, 1898. The mortality under 5 years of age was greater than in either of the other months. From acute respiratory diseases there were reported nearly 3,000 deaths, 700 more than in December, and 1,200 more than in January.

ary, 1898. Other local diseases were increased to a less degree, consumption likewise, deaths attributed to old age were double in number those of January last, and from unclassified causes there were 400 more. There was no change in the reported mortality from cancer, violence, and puerperal diseases. The increase has been chiefly in pneumonia and acute bronchitis (which caused 23 per cent of the total deaths), in diseases of the nervous system and to a less degree in other local diseases, and those enfeebled by age or by ill-defined conditions. The most of this increase is due to the prevailing epidemic of la grippe, from which directly many deaths have been reported, but the majority have been returned as from the causes noted as increased, and chiefly acute respiratory diseases and enfeebled conditions. It was estimated that la grippe caused 1,800 deaths in December; this month it is estimated that it has increased the mortality by 3,000, this number having been either directly caused or hastened by it, or nearly 25 per cent of the total mortality of the month. The fatality was relatively greatest in the rural parts of the State, the city of New York, with half the entire population, having but 600 of the 2,800 increased mortality over last January, and 300 of the 700 increase from acute respiratory diseases; rural towns, reporting 3,200 deaths, showed an increase of 1,200, and acute respiratory diseases, old age, and unclassified diseases had double the mortality of last January. The common epidemic diseases caused but 7 per cent of the total mortality of the month; there was a moderate increase from December in cerebro-spinal meningitis, whooping cough, and diarrheal diseases, some of the latter originating as la grippe, and decrease in typhoid fever and malaria. There was 1 death from smallpox in New York City; the cases at Rochester and vicinity have nearly recovered; in Genesee County smallpox continues at Le Roy, and cases have recently developed in the town of Darien, and in the adjoining county of Erie there is a case at Tonawanda, the origin being not yet ascertained; there is also a case at New Hartford, Oneida County, coming from Nebraska. The month's average temperature was about the normal, with extreme ranges from 52° to 14°; more clear days than usual, low, relative humidity, high barometer, and precipitation slightly deficient, winds variable and high.

OHIO—Columbus.—Month of January, 1899. Estimated population, 140,000. Total number of deaths, 154, including diphtheria, 1; enteric fever, 1; la grippe, 24, and 27 from phthisis pulmonalis.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

	ъ́г : Э́г	from .				1	Deat	hs fi	rom-	_				
Cities.	Week ended.	Population, U Census of 189	Total deaths fall causes.	Phthisis pul- monalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Allegheny, Pa	Mar. 4	105, 287 8, 338	43	8						1			1	4
Aurora, Ill	Feb. 25	19, 688 434, 489	14 205	1 24						1 2		1 2		
Bay City, Mich	Feb. 25	27, 839	8 7							ī				
Binghamton, N. Y	Mar. 4	27, 839 35, 005	13 187	21										
Boston, Mass Bristol, R. I	Feb. 25	448, 477 5, 478	1				•••••							1
Brocton, Mass Cambridge, Mass Charleston, S. C	Mar. 4	27, 294 70, 028 a 54, 955	6 26 b32	5										•••••

a Estimated population, 65,165—white, 28,870; colored, 36,295. bWhite, 14; colored, 18.

MORTALITY TABLE, CITIES OF THE UNITED STATES—Continued.

	g Deaths from—													
Cities.	Week ended.	Population, U.	Total deaths from	Phthisis pul- monalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	W hooping
Cincinnati, Ohio				1								2		
Do	Feb. 17 Feb. 24									. 3				
Dayton, Ohio	Mar. 4	. 61, 220	36							. 1		1	ļ	
Detroit, Mich Du Bois, Pa	do				· ····	-		'	· ····	1	1	1		
Dunkirk, N. Y	do		i											
Erie, Pa Evansville, Ind	. Mar. 4	. 40, 634	16			-		·	.	· ···;	·· ····			
Everett, Mass	Feb. 25			1	1	: :::::				. 1				
Fall River, Mass	. Mar. 4	. 74,398	38	2		.								
Fitchburg, Mass Flint, Mich	. Feb. 25	. 22,037 9,803	12			· ····								
Greenville, S. C	. Mar. 4	. 8,607	5	2							.	.!		
Hoboken, N. J Holyoke, Mass	do	43, 618 35, 637	25 10			· ····	1			·	. 1		· ·····	.
Iron Mountain, Mich.	. Feb. 25		1 0								:			
Jacksonville, Fla	. Mar. 4	17, 201	15				.ļ		l	l	.	_		.]
Jersey City, N. J Johnstown, Pa	Mar. 5 Mar. 4		60	10		·[:::::						. 1		
Lancaster, Pa	do	32,011	16	2	1		.	l	l		.	.		
Lawrence, Mass Lewiston, Me	Feb. 25 Mar. 4	44,654 21,701	30			· · · · ·				1	ļ	·	·	. 1
Louisville, Ky	Mar. 2	161, 129	73	15	l									ī
Lowell, Mass	Mar. 4	77, 696	26	3			.			1	ļ			
Lynchburg, Va McKeesport, Pa	Feb. 25	19, 709 20, 741	10	1										
Malden, Mass	Mar. 4	23,031	lő											
Manchester, N. H Massillon, Ohio	do Feb. 25		19		ļ		ļ			ļ	ļ			ļ
Medford, Mass	Mar. 4	11,079	7 2	1	l							1	•••••	
Melrose, Masa Middletown N. V	Feb. 25	8,519	4								1			
Middletown, N. Y Milwaukee, Wis	Feb. 28 Feb. 25	11,977 204,468	8 80	9	•••••							1	1	
minneapolis, Minn	do	164,738	52	5						1			î	ï
Mobile, Ala Nashua, N. H	Mar. 4	31,076	27 0	1					•••••	•••••	ļ			
Nashville, Tenn	do	76, 168	36	11		•••••				 1			•••••	
New Bedford, Mass	do	40,733	20	2	•••••						ļ			
New Brunswick, N. J Newburyport, Mass	Feb. 25	18, 603 13, 947	3 4		•••••					•••••		•••••	•••••	•••••
New Orleans, La	do	242, 039	170	22						3				ï
Newport, R. I New York City, N. Y	Mor A	19, 457	1 201	170	•••••				•••••					;;
North Adams, Mass	do	a3, 438, 899 16, 074	1, 291 6	172						3	13	27	11	11
Pelersburg, Va	do	22,680	11											
Philadelphia, Pa Do	Mar. 4	1,046,964 1,046,964	639 566	62 68		•••••	•••••			38 40	1 2	30	•••••	3
Pittsburg, Pa	Feb. 25	238, 617	126											ĭ
Pittsfield, Mass Plainfield, N. J	do l	17, 281 11, 267	6 5	•••••	•••••	•••••				•••••		•••••		
Providence, R. I	do	132, 146	67	7								1		
Reading, Pa Richmond, Va	Mar 6	58, 661 81, 388	21 30											•••••
alt Lake City, Utah	Feb. 25	44, 843	8											•••••
san Diego, Cal	do	16, 159	6	1										•••••
an Jose, Cal anta Barbara, Cal	do i	18,060 5,864	3			•••••							•••••	•••••
nreveport, La	do	11,979	11	8										•••••
Do omerville, Mass	Mar. 4	11, 979 40, 152	5 13	2			-					- 1	•••••	•••••
pokane, Wash	Feb. 25	19, 922	13	1								• •		•••••
stamford, Conn	Mar. 4	15,700		····· ·			-							•••••
acoma, Wash	Feb. 25 Mar. 4	36, 006 25, 448	11 10											•••••
Valtham. Mass	do	18,707	3 .											•••••
Varren, Onio Vashington, D. C.	do Feb. 25	5, 973 230, 392	111	10				-				.ا		•••••
	do	35, 013	14				···· :	·					2	
Vichita, Kans	Mar 4	23, 853	8	ī į.						·· <u>·</u> ··				•••••
Vilmington, Del Viuona, Minn	Feb. 25	61, 431 18, 208	23	4 .	•••• •	••••	···: :	···· ·	••••		1			••••
Vorcester, Mass	do	84, 655	45	2 .							ï	1 .	<u></u> :	•••••
onkers, N. Youngstown, Ohio	Mar. 3	32, 033 33, 220	17 18	1 .								1 .	•••••	•••••
BYYY W HA UHIU	ATABLE . S		18		- 1	- 1	1		ł					1

Table of temperature and rainfall, week ended March 10, 1899. [Received from Department of Agriculture, Weather Bureau.]

Locality.	Temp	erature ir Fahrenhe	n degrees eit.	Rainfall in inches and hundredths.						
Documey.	Normal.	aExcess.	aDefic'ncy.	Normal	Excess.	Deficiency				
Atlantic Coast:					1					
Eastport, Me	28	8		.97		. 46				
Portland, Me Northfield, Vt	26	8		.84		36				
Northfield, Vt	18	10		.49						
Boston, Mass	28	9		.90		75				
Vineyard Haven, Mass	33	5		.84		.35				
Nantucket, Mass	32	5	•••••	.72		49				
Woods Hole, Mass	32	4		.94		54				
Block Island, K. I	30 30	4 7		1.07		68				
New Haven, Conn	26	8		1.01 .63		33				
Nam Vork N V	32	6		.03	.14	.02				
Harrisburg, Pa	34	4	***************************************	.69	.35					
Philadelphia, Pa. New Brunswick, N. J. Atlantic City, N. J.	35	7		.77	.42					
New Brunswick, N. J.	33	4		1.08	.10					
Atlantic City, N. J	35	l Ž		.84		.12				
Baltimore, Md	37	5		. 91						
Washington, D. C	37	6		.84		. 34				
Lynchburg, Va	41	4		.84	. 15					
Cape Henry, Va	44	3		. 95	.08					
Norfolk, Va	41	5		.98		. 11				
Charlotte, N. C	45	3		1.12	.47					
Raleigh, N. C	43	8		1.08		.44				
Norfolk, Va	47			. 95	.30					
Hatteras, N. C	47	1		1.15	.12					
Wilmington, N. C Columbia, S. C	50	3		.84		.18				
Charleston S. C	51 53	3		1.12	.58	41				
Charleston, S. C	. 51	1		. 84		.41				
Augusta, GaSavannah, Ga	55	4 3		1.01	. 69	.37				
Jacksonville, Fla	59	4		.77 .81		.67				
Jupiter, Fla	67	5	***************************************	.63		.41				
Key West, Fla	72	2		.38		.16				
		_				.10				
Atlanta, GaTampa, Fla	48	1		1.20	2.01					
Tampa, Fla	66	Ô		.76	1.38					
Pensacola, Fla	57	ŏ		1.06	.22					
Mohile Ala	56	Ō		1.25	. 59					
Montgomery, AlaVicksburg, Miss	53	2		1.34	.95					
Vicksburg, Miss	54	1		1.29	.33					
New Orleans, La	59	0		1.15	.24					
Shrevenort Le	53		2	1.05		.37				
Fort Smith, ArkLittle Rock, Ark	45		3	. 89	.22					
Little Rock, Ark	48		1	1.32	·····	.20				
Palestine, lex	53		2	.84		. 43				
Galveston, Tex	59		1	.70		. 62				
San Antonio, Tex	58	· • • • • • • • • • • • • • • • • • • •	2	.49	•••••	.27				
Corpus Christi, Tex	61	•••••	1	. 53		. 15				
Ohio Valley and Tennessee :	47		1	1.33	.23					
Memphis, Tenn Nashville, Tenn	45	1	•	1.33	1.29	***************************************				
Chattanoora Tenn	46	- 1	2	1.40	1.25	.17				
Knorville Tenn	43	1	.	1.33	.07	• • • •				
Louisville, Ky	40	î		1.06		.01				
Indianapolis, Ind	34	2		. 91	. 67	************				
Chattanooga, Tenn Knoxville, Tenn Louisville, Ky Indianapolis, Ind. Cincinnati, Ohio	38 33	ō		.87	.00	••••••				
	33	5		.88		.09				
Parkersburg, W. Va	36 35	5		.77		. 21				
Pittsburg, Pa	35	6		.70		.01				
Lake Region ·		_	ŀ							
Oswego, N. Y	26	6		. 63		. 26				
Oswego, N. Y	25 26		••••	.64	.07	·····				
Випаю, N. Y	26	6	•••••	.68	. 33	•••••				
Erie, Pa	29 29	4	•••••	.82 .70	. 25 . 69	••••••				
Cleveland, Ohio Sandusky, Ohio	29	6 5				***************************************				
Toledo, Ohio	30 30 27	5		. 75	.61 1.21	••••••				
1 VIOUD, VIIIV	27	5		.49 .57	1.30	••••••				
Detroit Mich	21	3		.56	.43	••••••				
Detroit, Mich	27									
Lansing, Mich	27				16					
Lansing, Mich Port Huron, Mich	27	8		. 63	.16					
Lansing, Mich	27				. 16	••••••				
Lansing, Mich	27 24 19	8		. 63 . 49	.16	.01				
Detroit, Mich	27 24 19 14	6		.63 .49 .28	. 16	.01				

a The figures in these columns represent the average daily departure.

Table of temperature and rainfall, week ended March 10, 1899—Continued.

Locality. Normal	1 1 2	. aDefic'ncy.		. 09 .98 .36 .34 .52 .25 1.40 .1.12 1.31 1.53 .86 2.37 1.03 .02 .72 .19 .25 .43 .31 .31 .31 .33 .31 .32	Deficiency
Milwaukee, Wis. 24 Chicago, Ill. 28 Duluth, Minn. 17 Upper Mississippi Valley: St. Paul, Minn. 19 La Crosse, Wis. 22 Dubuque, Iowa. 24 Davenport, Iowa. 25 Keekuk, Iowa. 31 Hannibal, Mo. 34 Springfield, Ill. 33 Cairo, Ill. 41 St. Louis, Mo. 36 Missouri Valley: Columbia, Mo. 36 Springfield, Mo. 38 Kansas City, Mo. 34 Topeka, Kans. 35 Concordia, Kans. 35 Concordia, Kans. 35 Concordia, Kans. 35 Concordia, Kans. 32 Lincoln, Nebr. 28 Sioux City, Iowa. 24 Yankton, S. Dak. 22 Valentine, Nebr. 21 Huron, S. Dak. 22 Valentine, Nebr. 31 Bismarek, N. Dak. 33 Rocky Mountain Region: Havre, Mont. 20 Mapid City, S. Dak. 22 Wallawalla, Wash. 32 Williston, N. Dak. 33 Rocky Mountain Region: Havre, Mont. 20 Rapid City, S. Dak. 22 Spokane, Wash. 32 Wallawalla, Wash. 38 Baker City, Oreg. 37 Winnemucca, Nev. 35 Idaho Falls, Idaho 22 Salt Lake City, Utah. 36 Lander, Wyo. 36 Cheyenne, Wyo. 36 Cheyenne, Wyo. 36 Pueblo, Colo. 35 Pueblo, C	1	1 1 1 3 0 3 3 3 2 6 4 4 7 8 6 8 8	.56 .28 .28 .40 .42 .35 .44 .42 .83 .98 .97 .77 .70 .91 .40 .35 .28 .21 .21 .21 .21 .21	. 98 . 36 . 34 . 52 . 25 1. 40 . 21 1. 12 1. 31 1. 53 . 86 2. 37 1. 08 . 02 . 72 . 29 . 19 . 25 . 33 . 31 . 31	.03
Milwaukee, Wis. 24 Chicago, Ill. 28 Duluth, Minn. 17 Upper Mississippi Valley: St. Paul, Minn. 19 La Crosse, Wis. 22 Dubuque, Iowa. 24 Davenport, Iowa. 25 Keekuk, Iowa. 31 Hannibal, Mo. 34 Springfield, Ill. 33 Cairo, Ill. 41 St. Louis, Mo. 36 Missouri Valley: Columbia, Mo. 36 Springfield, Mo. 38 Kansas City, Mo. 34 Topeka, Kans. 35 Concordia, Kans. 35 Concordia, Kans. 35 Concordia, Kans. 35 Concordia, Kans. 32 Lincoln, Nebr. 28 Sioux City, Iowa. 24 Yankton, S. Dak. 22 Valentine, Nebr. 21 Huron, S. Dak. 22 Valentine, Nebr. 31 Bismarek, N. Dak. 33 Rocky Mountain Region: Havre, Mont. 20 Mapid City, S. Dak. 22 Wallawalla, Wash. 32 Williston, N. Dak. 33 Rocky Mountain Region: Havre, Mont. 20 Rapid City, S. Dak. 22 Spokane, Wash. 32 Wallawalla, Wash. 38 Baker City, Oreg. 37 Winnemucca, Nev. 35 Idaho Falls, Idaho 22 Salt Lake City, Utah. 36 Lander, Wyo. 36 Cheyenne, Wyo. 36 Cheyenne, Wyo. 36 Pueblo, Colo. 35 Pueblo, C	1	1 1 1 3 0 3 3 3 2 6 4 4 7 8 6 8 8	.56 .28 .28 .40 .42 .35 .44 .42 .83 .98 .97 .77 .70 .91 .40 .35 .28 .21 .21 .21 .21 .21	. 98 . 36 . 34 . 52 . 25 1. 40 . 21 1. 12 1. 31 1. 53 . 86 2. 37 1. 08 . 02 . 72 . 29 . 19 . 25 . 33 . 31 . 31	.03
Upper Mississippi Valley: St. Paul, Minn	1	1 1 1 3 0 3 3 3 2 6 4 4 7 8 6 8 8	.28 .28 .28 .40 .42 .35 .44 .42 .83 .93 .77 .70 .91 .40 .35 .28 .21 .18 .21 .21 .21 .21 .21 .21 .21 .21 .21 .21	.36 .34 .52 .25 1.40 .21 1.12 1.31 1.53 .86 2.37 1.03 .02 .72 .19 .25	.03
Upper Mississippi Valley: 3t. Paul, Minn 19 St. Paul, Minn 19 La Crosse, Wis 22 Dubuque, Iowa 24 Davenport, Iowa 26 Keokuk, Iowa 31 Hannibal, Mo 34 Springfield, III 33 Cairo, III 41 St. Louis, Mo 36 Missouri Valley: 36 Columbia, Mo 36 Springfield, Mo 38 Kansas City, Mo 34 Volentia, Kans 35 Concordia, Kans 32 Lincoln, Nebr 23 Sioux City, Iowa 24 Yankton, S. Dak 22 Yalentine, Nebr 21 Huron, S. Dak 22 Yalentine, Nebr 21 Huron, S. Dak 22 Valentine, Nebr 21 Huron, S. Dak 22 Wollston, N. Dak 13 Booky Mountain Region: 42 Have, Mont 20	1	1 1 1 3 0 3 3 3 2 6 4 4 7 8 6 8 8	.28 .28 .40 .42 .35 .44 .42 .83 .98 .77 .70 .91 .40 .35 .28 .21 .21 .21 .21	. 34 .52 .25 1. 40 .21 1. 12 1. 31 1. 53 .86 2. 37 1. 08 .02 .72 .29 .19 .25	.03
Dubuque, Iowa	1	1 1 3 0 3 3 3 2 6 4 7 8 6 8 8 7 4 3 9	.28 .40 .42 .35 .44 .83 .98 .98 .77 .70 .91 .40 .35 .28 .28 .21 .21 .18 .21 .21	.52 .25 1.40 .21 1.12 1.31 1.53 .86 2.37 1.03 .02 .72 .29 .19 .25	.03
La Urosse, Wis. 22	1	1 1 3 0 3 3 3 2 6 4 7 8 6 8 8 7 4 3 9	.28 .40 .42 .35 .44 .83 .98 .98 .77 .70 .91 .40 .35 .28 .28 .21 .21 .18 .21 .21	.52 .25 1.40 .21 1.12 1.31 1.53 .86 2.37 1.03 .02 .72 .29 .19 .25	.03
Dubuque, Iowa		1 1 3 0 3 3 3 2 6 4 7 8 6 8 8 7 4 3 9	.40 .42 .35 .44 .42 .83 .98 .77 .70 .91 .49 .25 .28 .21 .21 .21 .21	2.25 1.40 21 1.12 1.31 1.53 .96 2.37 1.08 .02 .72 29 .19 .25	.03
Davenport, Iowa 27		1 3 0 3 3 3 2 6 4 4 7 8 6 8	. 422 . 354 . 444 . 432 . 83 . 98 . 77 . 70 . 91 . 40 . 35 . 28 . 28 . 21 . 21 . 21 . 21 . 21 . 21 . 21 . 21	1.40 .21 1.12 1.31 1.53 .86 2.37 1.03 .02 .72 .29 .19 .25	.03
Des Moines, Iowa 25		0 3 3 3 2 2 6 4 4 7 8 6 6 8 8 3 6 6 7 4 3 9	.35 .44 .42 .83 .98 .77 .70 .91 .40 .35 .28 .21 .18 .21 .21	.21 1.12 1.31 1.53 .86 2.37 1.08 .02 .72 29 .19 .25	.03
Hannibal, Mo		2 6 4 7 8 6 8 8 3 6 7 4 3 9	. 42 .83 .98 .77 .70 .91 .49 .49 .28 .28 .21 .18 .21 .14	1.31 1.53 .86 2.37 1.03 .02 .72 .29 .19 .25	.03
Springfield, Ill. 33 Cairo, Ill. 41 St. Louis, Mo. 36 Missouri Valley: 36 Columbia, Mo. 36 Springfield, Mo. 38 Kansas City, Mo. 34 Topeka, Kans. 32 Understand 35 Concordia, Kans. 32 Lincoln, Nebr. 28 Omaha, Nebr. 28 Sioux City, Iowa. 24 Yankton,S. Dak 22 Valentine, Nebr. 21 Huron, S. Dak 17 Pierre,S. Dak. 20 Moorhead, Minn. 10 Bismarck, N. Dak 13 Wolliston, N. Dak 13 Booky Mountain Region: 20 Havre, Mont. 20 Malies City, Mont. 20 Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 38 Baker City, Oreg 27 Winnemucca, Nev 35 Idaho F			.83 .98 .77 .70 .91 .49 .40 .35 .28 .21 .18 .21 .21 .14	1.53 .86 2.37 1.03 .02 .72 .29 .19 .25 	.08
Cairo, Ill		2 6 4 7 8 6 8	.98 .77 .70 .91 .49 .35 .28 .21 .18 .21 .21	.86 2.37 1.08 .02 .72 .29 .19 .25 	.08
St. Louis, Mo. 36 Missouri Valley: 36 Columbia, Mo. 36 Springfield, Mo. 38 Kansas City, Mo. 34 Topeka, Kans. 35 Concordia, Kans. 32 Lincoln, Nebr. 28 Sioux City, Iowa. 24 Yankton, S. Dak. 22 Yalentine, Nebr. 21 Huron, S. Dak. 20 Moorhead, Minn. 10 Bismarck, N. Dak. 13 Rocky Mountain Region: 13 Havre, Mont. 20 Helena, Mont. 27 Milles City, Mont. 20 Rapid City, S. Dak. 22 Spokane, Wash. 32 Wallawalla, Wash. 38 Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho. 22 Salt Lake City, Utah. 36 Lander, Wyo. 29 North Platte, Nebr. 30 Denver, Colo. 35		3 6 7 4 3 9	.77 .70 .91 .49 .40 .35 .28 .28 .21 .11 .14 .14	2.37 1.03 .02 .72 .29 .19 .25	.08
Missouri Valley: Columbia, Mo		3 6 7 4 3 9	.70 .91 .49 .40 .35 .28 .21 .11 .21 .21	1.03 .02 .72 .29 .19 .25	.08
Springfield, Mo 38 Kansas City, Mo 34 Topeka, Kans 34 Wichita, Kans 35 Concordia, Kans 32 Lincoln, Nebr 28 Omaha, Nebr 28 Sioux City, Iowa 24 Yankton, S. Dak 22 Valentine, Nebr 21 Huron, S. Dak 17 Pierre, S. Dak 20 Moorhead, Minn 10 Bismarck, N. Dak 13 Wolliston, N. Dak 13 Booky Mountain Region: 20 Havre, Mont 20 Milles City, Mont 20 Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 38 Baker City, Oreg 27 Winnemucca, Nev 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo	2	4 7 8 6 8 	.91 .49 .40 .35 .28 .21 .18 .21 .21 .14	.02 .72 .29 .19 .25	.08
Kansas City, Mo. 34 Topeka, Kans. 34 Wichita, Kans. 35 Concordia, Kans. 35 Concordia, Kans. 32 Lincoln, Nebr. 28 Omaha, Nebr. 28 Sioux City, Iowa. 24 Yankton, S. Dak. 22 Valentine, Nebr. 21 Huron, S. Dak. 17 Pierre, S. Dak. 20 Moorhead, Minn. 10 Bismarck, N. Dak. 13 Williston, N. Dak. 13 Bocky Mountain Region: Havre, Mont. 20 Hayre, Mont. 20 Rapid City, Mont. 20 Rapid City, Mont. 32 Wallawalla, Wash. 38 Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho 25 Salt Lake City, Utah. 36 Lander, Wyo. 29 North Platte, Nebr. 30 Denver, Colo. 32 Dodge City, Kans. 35 Oklahoma, Okla. 43 Amarillo, Fex. 38 Abilene, Tex. 39 Seattle, Wash. 34 Fire Market 24 Fort Canby, Wash. 44	2	7 8 6 8 3 6 7 4 3 9	.91 .49 .40 .35 .28 .21 .18 .21 .21 .14	.02 .72 .29 .19 .25	.08
Concordia, Kans. 32 Lincoln, Nebr. 28 Omaha, Nebr. 28 Omaha, Nebr. 28 Sioux City, Iowa. 24 Yankton, S. Dak. 22 Valentine, Nebr 21 Huron, S. Dak. 17 Pierre, S. Dak. 20 Moorhead, Minn 10 Bismarck, N. Dak. 13 Williston, N. Dak. 13 Williston, N. Dak. 27 Miles City, Mont. 20 Rapid City, S. Dak. 22 Spokane, Wash. 32 Wallawalla, Wash. 38 Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho. 22 Salt Lake City, Utah. 36 Lander, Wyo. 29 North Platte, Nebr. 30 Denver, Colo. 35 Pueblo, Colo. 32 Dodge City, Kans. 32 Dodge City, Kans. 34 Abilene, Tex. 39 Seatte, Wash. 34 Abilene, Tex. 39 Santa Fe, N. Mex. 34 El Paso, Tex. 51 Phemix, Ariz. 56 'acific Coast: Seattle, Wash. 40 Fort Canby, Wash. 44 Fortland, Oreg. 44	2	8 6 8 3 6 7 4 3 9	.40 .35 .28 .28 .21 .18 .21 .21 .14 .14	.29 .19 .25 .43 .33 .11	.08
Concordia, Kans. 32 Lincoln, Nebr. 28 Omaha, Nebr. 28 Omaha, Nebr. 28 Sioux City, Iowa. 24 Yankton, S. Dak. 22 Valentine, Nebr 21 Huron, S. Dak. 17 Pierre, S. Dak. 20 Moorhead, Minn. 10 Bismarck, N. Dak. 13 Williston, N. Dak. 13 Williston, N. Dak. 27 Miles City, Mont. 20 Rapid City, S. Dak. 22 Spokane, Wash. 32 Wallawalla, Wash. 38 Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho. 22 Salt Lake City, Utah. 36 Lander, Wyo. 29 North Platte, Nebr. 30 Denver, Colo. 35 Pueblo, Colo. 32 Dodge City, Kans. 32 Dodge City, Kans. 34 Abilene, Tex. 49 Santa Fe, N. Mex. 34 El Paso, Tex. 51 Phemix, Ariz. 56 'acific Coast: Seattle, Wash. 40 Fort Canby, Wash. 41 Tacoma, Wash. 40 Fort Canby, Wash. 41 Tacoma, Wash. 40 Fort Canby, Wash. 44 Fortland, Oreg. 44	2	3 6 7 4 3 9	.35 .28 .28 .21 .18 .21 .21 .14 .14	.19 .25 .43 .33 .11	.08
Concordia, Kans. 32 Lincoln, Nebr. 28 Omaha, Nebr. 28 Omaha, Nebr. 28 Sioux City, Iowa. 24 Yankton, S. Dak. 22 Valentine, Nebr 21 Huron, S. Dak. 17 Pierre, S. Dak. 20 Moorhead, Minn. 10 Bismarck, N. Dak. 13 Williston, N. Dak. 13 Williston, N. Dak. 27 Miles City, Mont. 20 Rapid City, S. Dak. 22 Spokane, Wash. 32 Wallawalla, Wash. 38 Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho. 22 Salt Lake City, Utah. 36 Lander, Wyo. 29 North Platte, Nebr. 30 Denver, Colo. 35 Pueblo, Colo. 32 Dodge City, Kans. 32 Dodge City, Kans. 34 Abilene, Tex. 49 Santa Fe, N. Mex. 34 El Paso, Tex. 51 Phemix, Ariz. 56 'acific Coast: Seattle, Wash. 40 Fort Canby, Wash. 41 Tacoma, Wash. 40 Fort Canby, Wash. 41 Tacoma, Wash. 40 Fort Canby, Wash. 44 Fortland, Oreg. 44	2	. 8 3 6 7 4 3 9	. 28 . 28 . 21 . 18 . 21 . 21 . 14 . 14 . 21	.25 .43 .33 .11	.08
Lincoln, Nebr	2	3 6 7 4 3 9	.28 .21 .18 .21 .21 .14 .14	.43 .33 .11	.08
Omaha, Nebr. 28 Sioux City, Iowa 24 Yankton, S. Dak 22 Valentine, Nebr. 21 Huron, S. Dak 17 Pierre, S. Dak 20 Moorhead, Minn. 10 Bismarck, N. Dak 13 Williston, N. Dak 13 Rocky Mountain Region: 20 Helena, Mont. 27 Miles City, Mont. 20 Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 38 Baker City, Oreg 27 Winnemucca, Nev. 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo. 26 Cheyenne, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Tex 38 Abliene, Tex 39 Pa	2	6 7 4 3 9	.21 .18 .21 .21 .14 .14	.33	.03
Valentine, Nebr 21 Huron, S. Dak 17 Pierre, S. Dak 20 Moorhead, Minn 10 Bismarck, N. Dak 13 Williston, N. Dak 13 Bocky Mountain Region: 20 Havre, Mont 20 Helena, Mont 20 Rapid City, Mont 20 Rapid City, S. Dak 22 Spokane, Wash 38 Baker City, Oreg 27 Winnemucca, Nev 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Tex 49 Santa Fe, N. Mex 34 Phemix, Ariz 56 Pacific Coast: 36 Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, W	2	6 7 4 3 9	.18 .21 .21 .14 .14 .21	.33	.01
Valentine, Nebr 21 Huron, S. Dak 17 Pierre, S. Dak 20 Moorhead, Minn 10 Bismarck, N. Dak 13 Williston, N. Dak 13 Bocky Mountain Region: 20 Havre, Mont 20 Helena, Mont 20 Rapid City, Mont 20 Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 38 Baker City, Oreg 27 Winnemucca, Nev 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Tex 49 Santa Fe, N. Mex 34 Phemix, Ariz 56 Pacific Coast: 36 Seattle, Wash 40 Fort Canb	2	4 3 9	.21 .21 .14 .14 .21		.01
Huron, S. Dak 17 Pierre, S. Dak 20 Moorhead, Minn 10 Bismarck, N. Dak 13 Williston, N. Dak 13 Bocky Mountain Region: Havre, Mont. 27 Miles City, Mont. 20 Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 32 Wallawalla, Wash 32 Winnemucca, Nev 35 Idaho Falls, Idaho 22 Sait Lake City, Utah 36 Lander, Wyo. 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo 3	2	3 9	. 14 . 14 . 21	. 21	.01
Pierre, S. Dak 20 Moorhead, Minn 10 Bismarck, N. Dak 13 Rocky Mountain Region: 13 Havre, Mont 20 Helena, Mont 20 Rapid City, Mont 20 Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 38 Baker City, Oreg 27 Winnemucca, Nev 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 35 Oklahoma, Okla 43 Amarillo, Fex 38 Abliene, Tex 49 Santa Fe, N. Mex 34 Phomix, Ariz 56 Pacific Coast: 36 Seattle, Wash 41 Tacoma, Wash 40 For Canby, Wash 44 Portland, Oreg 44	2	9	. 14 . 21	.21	
Moorhead, Minn 10	2		. 21	.21	
Bismarck, N. Dak		9			
Williston, N. Dak					.03 .06
Havre, Mont. 20 Helena, Mont. 27 Miles City, Mont. 20 Rapid City, S. Dak. 22 Spokane, Wash. 32 Wallawalla, Wash. 38 Baker City, Oreg. 27 Winnemucca, Nev. 35 Idsho Falls, Idaho 22 Salt Lake City, Utah. 36 Lander, Wyo. 29 North Platte, Nebr. 30 Denver, Colo. 35 Pueblo, Colo. 35 Pueblo, Colo. 32 Dodge City, Kans. 35 Oklahoma, Okla 43 Amarillo, Tex 38 Abilene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex. 51 Phemis, Ariz. 56 Pacoma, Wash. 40 Fort Canby, Wash. 41 Tacoma, Wash. 40 Fort Canby, Wash. 44 Port Landy, Wash.		10	.07		.01
Helena, Mont	I		•••		.02
Miles City, Mont. 20 Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 38 Baker City, Oreg. 27 Winnemucca, Nev 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo. 26 Cheyenne, Wyo 39 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo 35 Spueblo, Colo 35 Pueblo, Colo 35 Pueblo, Colo 35 Spueblo, Colo 35 Pueblo, Colo 35 Soklahoma, Okla 43 Amarillo, Fex 38 Abilene, Tex 39 Santa Fe, N. Mex 34 El Paso, Tex 51 Phœnit, Ariz 56 Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Port Canby, Wash 44 Port Canby, Wash 44		22	. 13	.41	
Rapid City, S. Dak 22 Spokane, Wash 32 Wallawalla, Wash 38 Baker City, Oreg 27 Winnemucca, Nev 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Fex 38 Abliene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 56 Phœnix, Ariz 56 Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44	····	18	. 14		.03
Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo. 26 Cheyenne, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Tex 38 Abliene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phomix, Ariz 56 Seatife Coast: 36 Seatile, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44		13 11	10	.17	
Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo. 26 Cheyenne, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Tex 38 Abliene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phomix, Ariz 56 Seatife Coast: 36 Seatile, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44	••••••		. 19 . 49		.17
Baker City, Oreg. 27 Winnemucca, Nev. 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo. 26 Cheyenne, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Tex 38 Abliene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phomix, Ariz 56 Seatife Coast: 36 Seatile, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44		0	. 32		.06
Winnemucca, Nev. 35 Idaho Falls, Idaho 22 Salt Lake City, Utah 36 Lander, Wyo. 26 Cheyenne, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Tex 38 Abilene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex. 51 Phœnit, Ariz 56 *acific Coast: Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Port Canby, Wash 44	5		.46		.09
Salt Lake City, Utah 36 Lander, Wyo. 26 Cheyenne, Wyo 29 North Platte, Nebr 30 Denver, Colo 35 Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Fex 38 Abliene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phœnix, Ariz 56 *acific Coast: ** Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44			. 21		
Lander, Wyo	1		. 49		. 49
North Platte, Nebr 30		.0	. 35	.32	
North Platte, Nebr 30	***************************************	10 14	. 19	.19 .40	
Denver, Colo		ii	. 14 . 14	.40	. 04
Pueblo, Colo. 32 Dodge City, Kans 35 Oklahoma, Okla 43 Amarillo, Fex 38 Abliene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phœnix, Ariz 56 Pacific Coast: 56 Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44		13	.14	.18	
Oklahoma, Okla 43 Amarillo, Tex 38 Abilene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phœnix, Ariz 56 Pacific Coast: 56 Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44		3	. 14	.10	
Amarillo, Fex 38 Abilene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phœnix, Ariz 56 acific Coast: Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44		7	. 20		. 16
Abilene, Tex 49 Santa Fe, N. Mex 34 El Paso, Tex 51 Phœnix, Ariz 56 Pacific Coast: Seattle, Wash 41 Tacoma, Wash 40 Fort Canby, Wash 44 Portland, Oreg 44	•••••	3 5	. 35	.01	
Santa Fe, N. Mex. 34 El Paso, Tex. 51 Phomix, Ariz. 56 Pacific Coast: 56 Seattle, Wash. 41 Tacoms, Wash. 40 Fort Canby, Wash. 44 Portland, Oreg. 44	••••••	3	. 25 . 35		. 25
El Paso, Tex. 51		ő	. 35 . 21	.00	. 35
Phœnix, Ariz		ŏ	.07		.04
*acific Coast: 41 Seattle, Wash	2		.20		.20
Tacoma, Wash					
Fort Canby, Wash 44 Portland, Oreg. 44	ŀ		1.12		.77
Portland, Oreg 44	2		1.26		. 52
77	ŀ	1 1	1.54 1.51		. 14 . 50
Roseburg, Oreg 45	2	ō	1.09		.36
Eureka, Cal 47	2		1.47		
Redbluff, Cal 52	2 2		.87		.87
Carson City, Nev	2 2		. 35		. 25
Sacramento, Cal	2 2 2		.77		.77
San Francisco, Cal	2 2 2 1 5 4	••••••		•••••	.80
San Luis Obispo, Cal	2 2 2 1 5 4 2		.80		.32 .89
Los Angeles, Cal	2 2 2 3		.32		. 76
San Diego, Cal 56	2 2 2 1 5 4 2	•••••••	.32		. 10
Yuma, Ariz 61	2 2 2 3		.32		. 56

a The figures in these columns represent the average daily departure.

FOREIGN.

[Reports received from United States consuls through the Department of State and from other sources.]

Cholera, yellow fever, plague, and smallpox as reported to the Supervising Surgeon-General United States Marine-Hospital Service, December 31, 1898, to March 10, 1899.

CHOLERA.

Places.	D	ate.	Свеев.	Deaths.	Remarks.
India: BombayCalcuttaMadrasSingapore	Nov. 26 Nov. 19	-Jan. 31 -Jan. 21 -Jan. 27 -Dec. 30		. 247 . 24	
		YELLO	W FEV	ER.	
Brazil: Bahia Rio de Janeiro Colombia:	Nov. 11	-Feb. !1 -Jan. 27		. 68	
Barranquilla Juba : _ Habana	İ	–Jan. 9 –Feb. 16		1	
Mexico: Vera Cruz	Dec. 8	-Feb. 9	<u></u>	. 31	
		PL	AGUE.		
Thina: Hongkong	Dec. 10-	-Jan. 21	2	2	
Tainan Taipeh Taiwan	Dec. 25	••••••	10	2 2	. Plague exists.
ndia : Bombay Calcutta Madras		-Jan. 31		a 583	
fadagascar : Tamatave	Nov. 28		1	38	
		SMA	LLPOX		·
frica: Lorenzo Marquezrgentina:	Dec. 1-	Dec. 24.	18		
Buenos Ayres elgium : Antwerp	Nov. 1- Dec. 3-			5 14	
razil : Bahia Rio de Janeiro	Nov. 19- Nov. 11-	Feb. 4.	149	10 58	
anada: Province of Quebechina:	Jan. 26-	Feb. 23.	13	1	
Hongkongeylon: Colombo	Jan. 1- Dec., 24-	Jan. 28 -Dec. 31		1	
uba: Habana Santiago	Dec. 30 Feb. 23	•••••	. 1	-	In United States Army On steamship Thomas Brooks.
gypt : Cairo ngland :	Jan. 16-			4	
Liverpool	Dec. 3-	Jan. 21	. 2	1 1	

Cholera, yellow fever, plague, and smallpox, etc.—Continued.

SMALLPOX-Continued.

Places.		Date.		Cases.	Deaths.	Remarks.					
France:											
Paris	Dec	. 24-Feb.	11	.	. 3	1					
Gibraltar		30-Feb.			i						
India:	1] -	1 -	1					
Bombay	Nov	. 22-Jan.	31		10						
Calcutta	Nov	. 19-Dec.	17		3	i					
Colombo	Dec.	24-Dec.	31		ì						
Madras	Nov	. 26-Jan.	6		3						
Singapore		1-Dec.			13						
Italy:				1	1						
Milan	Jan.	22-Jan.	28	1		j					
Japan :		5		1 -							
Awomori Ken	Nov	. 18-Dec.	31	126	28						
Chiba Ken		9-Dec.		i							
Hiogo Ken		. 18-Dec.	8								
Iwate Ken		9-Dec.									
Kanagawa Ken		. 18-Dec.	8								
Nagano Ken	Dec.	9-Dec.	31	ī	1						
Nagasaki Ken		. 18-Dec.	8								
The Hokkaido		18-Dec.	8								
Tottori Ken		18-Dec.	8	3							
Korea:			• • • • • • • • • • • • • • • • • • • •	-		*					
Seoul	Jan.	1-Jan.	7	i		Smallpox endemic,					
Mexico:			•			-					
C. P. Diaz	Jan.	10	•••••			Do.					
		11-Feb.		10							
Chihuahua		7-Feb.			5						
City of Mexico		31-Feb.			14						
Juarez	Feb.	18	• • • • • • • • • • • • • • • • • • • •	15							
Monterey	Dec.	2-Jan.	5		3						
Nuevo Laredo	Jan.	29-Feb.	4	9	1						
Vera Cruz	Jan.				4						
Russia :											
Moscow	Dec.	24-Feb.	11	41	27						
Odessa	Jan.		11	13	8						
St. Petersburg	Jan.		4	13	3						
Warsaw	Jan.	16-Jan.	28		7						
Furkey:					1						
Bagdad		22-Nov.		96	20						
Constantinople	Jan.	2-Feb.	15		82						
Smyrna		25-Feb.	5		6						

AFRICA.

Smallpox in Lorenzo Marquez.

LORENZO MARQUEZ, DELAGOA BAY, SOUTHEAST AFRICA, January 17, 1899.

SIR: I have the honor to advise you that from December 18 to 24, inclusive, 1898, the cases of smallpox in the Lorenzo Marquez hospital were as follows:

Cases in the hospital on December 18, 11; entered, 1; discharged, 3; died, 1; remaining on December 24, 1898, 8.

The smallpox is now dying out, as it generally does with the coming of the hot weather.

I have the honor to be, sir, your obedient servant,

W. STANLEY HOLLIS, United States Consul.

Hon. SECRETARY OF THE TREASURY.

March 10, 1899 328

BRAZIL.

Sanitary report from Rio.

RIO DE JANEIRO, January 3, 1899.

SIR: I have the honor to transmit to you the official report for the week ended January 20. There were 283 deaths from all causes, a decrease of 15 as compared with the foregoing week; 10 deaths from accesso pernicioso, a decrease of 5; 13 deaths from yellow fever, a decrease of 7; 5 deaths from smallpox, a decrease of 2; 3 deaths from typhoid fever, none before; 1 death from diphtheria, none before; 1 death from measles, a decrease of 1; 2 deaths from beriberi, the same as before, and 68 deaths from tuberculosis, an increase of 16.

From the state of Sao Paulo I can give you some official data concerning the sanitary conditions during the month of November. The total number of deaths from all causes was 2,431, an increase of 1,179, as compared with the month of October, and from tuberculosis there died 142 persons, a decrease of 17, and from malarial fever, 71 persons,

an increase of 13.

From typhoid fever there died 28 persons (11 at the city of Sao Paulo), an increase of 2; from yellow fever none, and from smallpox 20, an increase of 5; 15 cases occurred at the city of Sao Paulo, 1 at Pantos, and 4 at Una.

In regard to other infectious diseases, there were in the state of Sao Paulo 5 deaths from measles, 3 deaths from diphtheria, 36 deaths from whooping cough, 2 deaths from erysipelas, 17 deaths from influenza, 18 deaths from dysentery, 2 deaths from leprosy, 7 deaths from cholera nostras, and 1 death from beriberi.

Since last report the following-named ships have been inspected and received bills of health of this office: January 30, steamship *Grecian Prince*, British, for New York; steamship *Bellarden*, British, for New York. February 1, steamship *Ivydene*, British for New York.

Respectfully, yours, W. HAVELBURG, M. D.,

Sanitary Inspector, U.S. M. H. S.

The SUPERVISING SURGEON-GENERAL, U. S. Marine-Hospital Service.

CUBA.

Sanitary report from Havana.

HAVANA, CUBA, March 3, 1899.

SIR: I have the honor to submit the following report for the week

ended Thursday, March 2, 1899:

In all probability the death rate during this week has been the lowest recorded since 1894. There have been but 187 deaths during this time from all causes. No deaths are reported either from yellow fever or smallpox.

There seems to be an increasing death rate from diphtheria, 5

deaths from that disease having occurred during the week.

A slight increase is also shown in deaths from different malarial fevers. Several cases of suspicious fever have been reported among the regulars stationed in the city and in the volunteer forces of the Seventh Army Corps in and around Marianno. From the medical staff of the Army I learn that none of these cases have been designated as yellow fever.

There continues heavy passenger traffic between this port and the United States. The 5 steamers plying between Florida and Havana carry about two-thirds of the total number of passengers leaving Havana. Mobile and New Orleans take but few, while the Ward Line and Spanish Line going to New York take about 150 a week. A great many second-class passengers are going to the States, nearly all of whom are discharged soldiers and civilian employees of the Army, such as teamsters, packers, etc. Nearly all of these men go to ports in Florida. Their baggage consists of blankets and personal clothing and is not packed in trunks or valises, and there is some difficulty in labeling these packages. Each package is examined and the number of packages on each steamer is so specified on the bill of health.

The United States Army transport *Michigan* has arrived here to take the Second Maine Artillery back to Savannah, Ga., where they will be mustered out. The Two-hundred-and-second New York will soon follow, and they will also return to Savannah. The Two-hundred-and-second New York has been stationed by detachments in different parts of the province of Pinar Del Rio. Yellow fever has been reported in one of these detachments at Guanajay. I was told by the medical officer, the yellow fever expert of the Army, who was sent to examine these cases, that they were undoubtedly yellow fever. I have since learned that this diagnosis has been changed by another officer of the medical

staff of the Army who followed the first.

The disinfecting barge *Protector* has arrived, having been caught in several heavy ice packs while at Hampton Roads, Va. Much of the copper below the water line has been torn from her hull. She also experienced several other injuries to her hull and fittings. These will be immediately repaired, and she will begin the work of disinfection as soon as possible.

I submit the following table of mortality statistics for the week just

ended.

Very respectfully,

W. F. BRUNNER,

Sanitary Inspector, U. S. M. H. S. The Supervising Surgeon-General,

U. S. Marine-Hospital Service.

[Inclosure.]

Mortality of the city of Havana for the week ended Thursday, March 2, 1899.

Cause of death.							
Enteric fever							
Enteric fever	1						
Pernicious fever							
Dysentery	_						
Enteritis	3						
Diphtheria. Pneumonia Fuberculosis.							
Pneumonia							
Tuberculosis	4						
Deaths from all causes	18						
Annual ratio per 1,000	48.6						

March 10, 1899 330

Case of smallpox on steamer Thomas Brooks at Santiago.

OFFICE OF MEDICAL OFFICER IN COMMAND,
MARINE-HOSPITAL SERVICE,
Santiago de Cuba, February 23, 1899.

SIR: I have the honor to report the arrival of the steamer *Thomas Brooks*, from Caimanera, Guantanamo Bay, with a case of smallpox.

The case, a cabin passenger, is being cared for at the isolation camp of the Army. The vessel was disinfected in the portions exposed to the infection, as well as possible, with the limited means at my disposal. The crew (22) were vaccinated.

The vessel, being the only means of communication between here and Guantanamo Bay, will continue her biweekly trips under close surveillance.

Respectfully, yours,

M. J. ROSENAU, Passed Assistant Surgeon U. S. M. H. S.

PERSIA.

Sanitary report from Teheran.

LEGATION OF THE UNITED STATES, Teheran, Persia, January 19, 1899.

SIR: In reply to circular of October 31, 1898, I beg to say that only the vaguest data are obtainable in this city. Some statistics were formerly to be had from a sanitary council holding weekly meetings, but for two years or more, owing to internal dissensions, no meetings of this council have taken place. There is no regulation requiring the report of deaths to the authorities, and, as the population is not accurately known, a reliable death rate can not be given. The population of Teheran is variously estimated at from 200,000 to 300,000. A census was attempted recently by the police department, but as this was connected in the popular mind with schemes for increased taxation, the results were probably below the truth. The authorities place the population between 290,000 and 300,000, but others with equal assurance contend it is much The only data serving to fix the number of deaths are obtained from the public washhouses, where the dead are brought to be washed before burial or transport to Koom or other holy places. According to H. E. Nayer-ul-Mulk, formerly president of the sanitary council, the number is between 15 and 17 per day. Those whose means allow them to prepare their own dead do not as a rule carry them to the public washhouses, nor are children under 8 or 9 years of age taken there. As the mortality among infants and children is very high, the above figures tell far from the whole story. European physicians, while unable to give the death rate, place it however rather below than above the average in normal conditions, that is, when there is no epidemic.

No system exists for the collection, removal, or disposition of garbage. It is simply thrown into the streets, where it constitutes the principal food supply of the dogs, which are the public scavengers. Dead animals, horses, donkeys, camels, etc., are not buried, but are taken outside the city walls and abandoned to the dogs and birds. Their skeletons whiten the plains in every direction beyond the city limits. There is a total lack of any system of drainage. The water supply is obtained from the Shimran district, ten miles north of the city, on the lower slopes of the Elburz range, either by open canals called jub, or underground canals called kanat. The method is as fol-

lows: Several wells are sunk at the base of the hills, and joined to form a reservoir. Pits are then dug from the reservoir in the direction of the ground to be irrigated, at distances apart of from 50 to 100 yards. These pits are often several hundred feet in depth, serving as ventilating shafts to the canal, which connects them at their bases. The kanats come to the surface in the city streets, or gardens, where the water is used indiscriminately for washing, bathing, and drinking. Europeans obtain their drinking water from certain kanats which have not been opened above the point from which their supply is drawn, and usually The general public take no precautions, using water boil and filter it. wherever found, no matter how filthy its condition. The fact that the kanats are not secured from filtration through the gravelly soil, and pass near or under the numerous villages along their course, renders all water of doubtful purity. Impure water is doubtless the source of much of the prevailing sickness, and the public bathhouses, in which hundreds bathe daily in the same pool, and which, though the water runs through them more or less continually, are emptied and cleaned only at long intervals, are another source of infection. That the health of the city is so good under such conditions is surprising. Physicians ascribe it in part to the long hot season, the sun acting as a disinfectant. noticeable, also, that all contagious diseases are usually of a mild formpossibly because the inhabitants are immunes—smallpox, syphilis, and contagious diseases generally, although widespread, being mostly of a benign character. On the other hand, notwithstanding the altitude and dry climate, lung trouble, as pneumonia, tuberculosis, etc., are always Malarial fever exists throughout the year, and the consumption of quinine is enormous. This fever, however, is neither so severe nor so common as in the Caspian provinces of Chilan and Mazenderan. Thermic fever, due to sun exposure, is common. Typhoid fever is common among Europeans. Physicians of long residence incline to the belief that it was unknown among the Persians until within a few years. On the other hand, the Persian language has a definite word for this It is said that the existence of typhoid fever was in like manner denied in India among the natives till post mortems revealed its characteristic lesions. It is, at all events, true that among native Persians the fever which they call typhoid is mild in form, and rarely, if ever, is attended by the consequences which characterize it elsewhere. Post mortem examination is not possible in their case. They do not regard typhoid fever or smallpox as dangerous, and pay comparatively little heed to either.

The current year has been unusually unhealthy. Smallpox has assumed now almost an epidemic character. Five cases have occurred among Europeans, viz, 3 in the Russian bank, of which 1 was fatal; 1 at the English bank, and 1 in the gas compamy, both confluent, and the latter since died. There have also been an unusually large number of cases of diphtheria among the natives, and 4 cases among Europeans; 2 in the English Legation, 1 in the American mission, and 1 in the Indo-European Telegraph Company. Of the 4 cases 3 were children, and all have recovered. During the late summer and autumn typhoid fever of a virulent type attacked the European colony. Of 7 cases known to me personally, 4 died. No case of plague is yet reported in Persia, but a few are reported in Kandahar. It is said to have existed there in a mild form for two years, its presence having been successfully concealed by the Russian authorities until it became bubonic. This, however, I can not verify.

March 10, 1899 332

In the absence of all statistical information and published reports, it would be impossible to prepare weekly sanitary reports of any value. Only general information is obtainable.

I have the honor to be, sir, your obedient servant,

ARTHUR S. HARDY.

Hon. SECRETARY OF THE TREASURY.

TURKEY.

Sanitary report from Constantinople.

[Report No. 209.]

CONSTANTINOPLE, January 16, 1899.

SIR: I have the honor to forward to the Department a French copy of what I have communicated to the International Sanitary Commission in consequence of the complaints expressed by the United States consular agent at Bassorah against the sanitary service of said place. More than once I have written in my reports about said service which is far from being what it ought to be. Mr. Hamilton, the United States consular agent, is perfectly right to complain, and I have already transmitted to the sanitary board said complaints. The result of my communication has not been so prompt as it ought to be. I forward at the same time a copy of what has been communicated to the minister of foreign affairs who is at the same time president of the International Sanitary Commission on said question.

COMMUNICATION OF THE UNITED STATES SANITARY REPRESENTATIVE.

"I am charged by the legation of the United States of America to make the following communication in regard to the lazaretto of Bassorah:

"For a long time past complaints and protests have been made against the quarantine service of Bassorah. These have been of no avail, and the lazaretto continues to be the subject of complaints from travelers To-day I bring to your notice a résumé of the report and the consuls. of the United States consul at Bassorah, stating that not only is the lazaretto in question one only in name, but travelers are subjected there to great discomfort and exposed to the danger of contracting every sort of disease. The consul begins his report by protesting in the most formal manner against two laws which are in force at Bassorah, one affecting natives of the country and one affecting persons of distinction. According to the laws and regulations now in force, travelers arriving at Bassorah are subject to quarantine, while the greater number of natives of the country are subject to none. They travel at night and thus elude the surveillance of the sanitary authorities. There is a constant traffic between Mohamara and Bassorah and the nocturnal traders pass the quarantine freely, thus rendering the existence of the lazaretto useless if not harmful. But this is not the only subject of complaint and protest on the part of the United States consul. The Island of Salahieh, on which it is desired to create a lazaretto, is an exceedingly unhealthy location. It is not only marshy but, owing to the absence of public latrines, it is little else than a receptacle for filth, which encumbers even the entrance to the so-called lazaretto. faith is to be placed in the reports of the physician in charge stating that the lazaretto is well conducted. The fact is patent that the laza-

retto is a veritable injury to travelers. A party of American ladies who had gone direct from London to Bombay and there transhipped without landing were recently detained at the lazaretto under conditions of the most unsanitary and revolting nature. During the time of their detention importation of corpses was carried on in defiance of the law, persons of distinction being allowed to transport the bodies of their dead.

"I beg the honorable council to take measures to ameliorate this condition of things and in particular to hire a small vessel on which persons of distinction can be accommodated for the period of quarantine."

It was at the sitting of December 20, 1898, that I made the above communication and it is only January 4, 1899, that the following telegram has been forwarded to the sanitary physician at Bassorah:

BASSORAH, January 24, 1899.

"Complaints have been made against the management and cleanliness of the lazaretto. Reserve part of the establishment for the accommodation of travelers of distinction. If they so desire, authorize them to keep the quarantine on board the vessel, or, if they prefer, on a small vessel which you will hire for the purpose, and anchor near Salahieh. We recommend very strict vigilance.

"Cozzonis."

At that same sitting the conclusion of the discussion which followed my communication was the appointment of a commission for the purpose of communicating to the Turkish Government the condition of the lazaretto of Bassorah, and the necessity of adhering to the sanitary convention of Venice as well as to that of Paris. Besides said copy I forwarded a copy of the proceedings of the International Sanitary Commission of January 26, from which it can be understood how difficult it is to obtain any improvement in the sanitary service, for every new step, every decision, depends upon the opinion of the different members of said commission—members who serve opposite interests. All the details of the discussion and all the opinions expressed are not reported in the proceedings, but I can not omit to remark that from the date of my communication on December 20, 1898, to that of the decision according to which special rooms must be built for distinguished passengers, January 26, 1899, more than one month has elapsed.

SPIRIDION C. ZAVITZIANO, U. S. Sanitary Commissioner.

FOREIGN STATISTICAL REPORTS.

AUSTRALIA—New South Wales—Sydney.—Month of December, 1898. Estimated population, 417,250. Total number of deaths, 520, including enteric fever, 6; measles, 5; influenza, 1; whooping cough, 71, and 31 from phthisis pulmonalis.

BAHAMAS.—Dunmore Town.—Two weeks ended February 24, 1899. Estimated population, 1,472. Total number of deaths, 1. No contagious diseases.

Governors Harbor.—Four weeks ended February 25, 1899. Estimated population, 1,500. No deaths and no contagious diseases.

Green Turtle Cay—Abaco.—Two weeks ended February 23, 1899. Estimated population, 3,900. No deaths and no contagious diseases.

Nassau.—Week ended February 25, 1899. Estimated population, 11,000. Number of deaths not reported. No contagious diseases.

CANADA—Manitoba—Winnipeg.—Month of February, 1899. Estimated population, 7,985. Total number of deaths not reported. Two deaths from diphtheria.

CHILE—Antofagasta.—Month of January, 1899. Estimated population, 14,000. Total number of deaths, 66, including enteric fever, 6, and 5 from phthisis pulmonalis.

ITALY—Florence.—Month of December, 1898. Estimated population, 196,865. Total number of deaths, 292, including diphtheria, 4; enteric fever, 12; whooping cough, 1, and 47 from phthisis pulmonalis.

FRANCE—Marseilles.—Week ended February 20, 1899. With a population of 447,344 the average number of deaths in the city of Marseilles was 34.2 during the week ended February 20. Public health continues good, with perhaps a slight increase in the number of cases of little importance, due to unseasonable weather. For over a week the thermometer has averaged 19° C., which is considerably higher than is usual in February. Since February 13, 5 clean bills of health have been issued at this consulate to vessels proceeding to ports in the United States.

GREAT BRITAIN—England and Wales.—The deaths registered in 33 great towns in England and Wales during the week ended February 18, 1899, correspond to an annual rate of 19.5 a thousand of the aggregate population, which is estimated at 11,404,408. The highest rate was recorded in Preston, viz, 28.8, and the lowest in Huddersfield, viz, 12.1.

London.—One thousand six hundred and eighty six deaths were registered during the week, including measles, 27; scarlet fever, 4; diphtheria, 40; whooping cough, 38; enteric fever, 16, and diarrhea and dysentery, 11. The deaths from all causes correspond to an annual rate of 19.3 a thousand. In greater London 2,270 deaths were registered, corresponding to an annual rate of 18.1 a thousand of the population. In the "outer ring" the deaths included 18 from diphtheria, 11 from measles, 2 from scarlet fever, and 16 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended February 18, 1899, in the 23 principal town districts of Ireland was 27.5 a thousand of the population, which is estimated at 1,012,148. The lowest rate was recorded in Dundalk, viz, 0.0, and the highest in Kilkenny, viz, 56.6 a thousand. In Dublin and suburbs 183 deaths were registered, including diphtheria, 2; enteric fever, 2; influenza, 7, and whooping cough, 4.

Scotland.—The deaths registered in 8 principal towns during the week ended February 18, 1899, correspond to an annual rate of 28.0 a thousand of the population, which is estimated at 1,587,414. The lowest mortality was recorded in Dundee, viz, 18.0, and the highest in Paisley, viz, 34.5 a thousand. The aggregate number of deaths registered from all causes was 855, including diphtheria, 4; measles, 9; scarlet fever, 11, and whooping cough, 31.

335 March 10, 1899.

Weekly return of births, deaths, and marriages in 8 principal towns of Scotland.

[By authority of the registrar-general.]

The death rate in 8 principal towns during the week ended with Saturday, February 18, 1899, was 28.0 per thousand of estimated population. This rate is 7.6 above that for the corresponding week of last year, but 3.2 below that for the previous week of the present year.

The lowest mortality was recorded in Dundee, viz, 18.0 per thousand; and the highest in Paisley, viz, 34.5 per thousand.

The mortality from the 7 most familiar zymotic diseases was at the rate of 2.5 per thousand, being 0.8 below that for last week.

The deaths from bronchitis, pneumonia, and pleurisy amounted to 280, being 63 below the number for the previous week.

The mean temperature was 43.2°, being 3.4° above that for the week immediately preceding, and 2.7° above that for the corresponding week of 1898.

ITALY—Venice.—Month of January, 1899. Estimated population, 27,438. Total number of deaths, 42, including diphtheria, 2; measles, 1, and 2 from typhus fever.

Jamaica.—Two weeks ended February 11. Estimated population, 694,866. Total number of deaths not reported. No contagious diseases.

Kingston.—Month of January, 1899. Estimated population, 34,314. Total number of deaths, 155. No deaths from contagious diseases.

NORFOLK—Island.—Month of December, 1898. Estimated population, 876. No deaths. Measles epidemic.

RUSSIA—Siberia—Vladivostock.—Month of September, 1898. Estimated population, 25,000. Total number of deaths, 20, including 1 from diphtheria.

Month of October. Total number of deaths, 44, including diphtheria, 3, and 4 from typhus fever.

Month of November. Total number of deaths, 62, including diphtheria, 1; scarlet fever, 4, and 6 from typhus fever.

MORTALITY TABLE, FOREIGN CITIES.

	-glu	Deaths from—										
Cities.	Week ended.		Total deaths fi	Cholers.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Acapulco	Feb. 18		2									ļ
Alexandretta	Feb. 4		9 5									
Amhersthurg	. Feb. 25	2,300	0				ļ					
AmsterdamAutofagasta	. Feb. 18	512,758 14,000	167 66					3		1	2	4
Athens	. Feb. 18	145,000	1 70					1				
Rarmen	. Feb. 4	127,006	53		·			1	ļ		1	
Do Barranquilla	Feb. 11	127, 006 40, 000	30 11								2	
Relize	. Feb. 23	18,000	7									1
Relleville	. reb. 20	10,300	2		ļ						ļ	
Do Berlin	Feb. 27 Jan. 28	10,300 1,747,903	582		<u> </u>			1	7	17	3	
Do	Feb. 4	1,747,903	546					1	.6	19	7	
Birmingham	Feb. 18 Jan. 31	510, 313	168	8		3		2		4	44	2
BombayBradford	Feb. 11	821, 764 231, 260	a1,601					1	l		2	1
Bremen	Feb. 4	144,500	34		ļ. .	ļ			ļ. .	1		
Do Breslau	Feb. 11 Feb. 4	144,500 300,000	66 166				•••••	1	1	2	1	2
Do	Feb. 11m	300,000	237						4	4	î	1
Brussels	do	551, 611	225					5		3	11	5
Cairo Do	Jan. 28 Feb. 4	570, 062 570, 062	487 356			2 1	1 2	3		5		
Calcutta	Jan. 21	681,560	b 543	30		<u>-</u>				Ĭ		
Callao	Jan. 5	25,000	22	 -			•••••	1		ļ		
CarthagenaCatania	Feb. 10 Feb. 16	25,000 124,000	10 82				1	8	2	2		
Chandiere Junction	Feb. 25	500	1									
Chemnitz		172, 840 172, 840	63 63				•••••	•••••		1	1 1	•••••
Do Chihuahua		24,000	23				•••••	•••••			2	
Ciudad Porfirio Diaz	do	12,000					•••••					
Coburg Do	Jan. 21 Jan. 28	19, 470 19, 470	11 2								•••••	
Do	Feb. 4	19, 470	9									
Do	Feb. 11	19,470	9					•••••	•••••	ļ		
Cognac Do	Feb. 4 Feb. 11	20, 400 20, 400	6 8	•••••						·		•••••
Cologne	Feb. 4	354, 368	143					1		3	2	2
Ďo	Feb. 11	354, 368	185							6		2
Colombo Do		130, 000 130, 000	98 119									•••••
Colon	Feb. 8	8,000	2									
Do		8, 000 750, 000	3		•••••						3	•••••
Constantinople Copenhagen		351,000	149							2	8	
Crefeld	Feb. 18	110,000	38							2		
DundeeFlushing	do	166, 072 10, 571	56 1					•••••	•••••	1		1
Frankfort-on-the-Main	Feb. 4	253,000	65							1		2
Do	Feb. 11	253,000	74				•••••	1	•••••	1	•••••	1
FunchalGeneva	Feb. 12 Feb. 4	36, 982 87, 326	16 44	•••••						6		••••
Ghent	Feb. 11	133, 755	70							1		
DoGibraltar	Feb. 18	133,755	58 10				•••••	•••••		•••••	1	1
Girgenti	Feb. 11	25, 900 24, 428	11									•••••
Gothenburg	do	122, 205	48									1
Guatemala Halifax	Feb. 13 Feb. 25	65, 000 45, 000	37 12									•••••
Hamilton, Bermuda	do	51,000										
Hongkong	Jan. 14 Jan. 21	51,000 248,710 248,710 248,710	67									
Do Do	Jan. 21 Jan. 28	248,710					••••		1			
La Rochelle	Feb. 6	30,000	13									
Do	Feb. 13	30,000	19					ا ر				•••••
LeedsLeipsic	Feb. 18 Feb. 4	423, 889 422, 071						4	1			1
Do	Feb. 11	422, 071	154					1		1	2	•••••
Licata	do	20,000	11			•••••	•••••	3				i
Liege	ao	169, 102	5Z		•••••	•••••				••••••		

a Plague 540 officially reported; probably 1,100. b Plague, 1. c Plague, 1.

MORTALITY TABLE, FOREIGN CITIES—Continued.

			-glu	P P P				De	aths	from	-				
Cities. Go		Estimated popula- tion.	Total deaths f	Cholone	Vellom forms	Smallnow	Typhus fayar	Enteric fever	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.			
Livingston	Feb	. 18	1,500) ;	5										
London, Ontario	Feb	. 14	42,000 42,000	13				,							
Do	∣ Feb	. 20	42,000	19									. ļ .		
Madras	. Jan	. 27	452, 518	429		2	··· ····					. 7			
Mannheim Matamoras	. Feb	. 11 . 24	111, 241 16, 304	35	,	••• ••••			•		. 1	*****			
Mayence	Feb	. 18	80,000					.					3		
Mazatlan		do	16, 700								1				
Messina		. 11	16, 700 107, 000	49						. 1					
Do		. 18	107,000	55								.			
Mexico	Feb.	. 19	344, 377	540	·	-	2	14		1	1				
Milan		. 18	481, 297					•• ••••	•		-	·			
Monte Cristi		do	3,000	0		···¦·····		•• ••••	••••••	··{·····	· ·····	·			
Montevideo	Feb.	. 23 21	25,000 215,061	61 82		•• ••••					· · · · · ·	4	•••••		
Moscow	Feb.	4	1,000,000	524			4	1		. 15	6	15	ï		
Do	Feb	11	1,000,000	465			3			1 10	6	13	3		
Nagasaki	Jan.	31	132,000								. 3				
New Castle on Tyne	Feb.	. 11	223,000	85					· • • • •	. 1		1	2		
Nice			108.227	36					· ··· <u>:</u> -			•••••	•••••		
Numera huna		12	108, 227	50 93		•• ••••			. 1		···· ·	•••••	•••••		
Nuremburg Do	Jan.		203,000	108			·· ····		· • • • • •	2			5 2		
Odessa	Jan.	11	203, 000 383, 000	168			. 1	-	. 1	1 4	3		4		
Osaka and Hiogo		25	202, 912	118							5				
Palermo		11	300,000	128						2					
Paris	d	lo	2, 511, 955	1,087	ļ		. 1	ļ					•••••		
Pernambuco	Jan.	1	200,000	103						ļ			•••••		
Do	Jan.		200,000	108	····	· ····	•	·				•••••	•••••		
Do Do		15	200,000	111 112		•	· ·····	·	· · · · · ·			•••••	•••••		
Do	Jan. Jan.	22 29	200,000 200,000	107						•••••	• • • • • •	•••••	•••••		
Plymouth		18	99, 848	39				·			••••		•••••		
Prague		11	196, 257	161					4	1	4	11	2		
Progreso	Feb.		4,800	0											
Puerto Cortes	Feb.	22	2,000	1	ļ				 .				•••••		
Quebec	Feb.		73, 000		ļ	·	· · · · · ·		•••••	1			•••••		
Queenstown Do	Jan.	21	15,000	4		· ·····		•••••	•••••		•••••	•••••	•••••		
Do	Jan. Feb.	28	15, 000 15, 000	7			·		•••••		•••••	-	••••		
Do	Feb.		15,000	í	i				•••••				•••••		
Rheims	Feb.	4	107, 709	48					1				••••		
Do	Feb.	11	107,709	50							1		•••••		
Bio de Janeiro	Jan.	20	107, 709 107, 709 750, 000	a 283		13	5		3		1	1 .	•••••		
Rotterdam		18	309, 307	122	ļ				3	1	3	····· .	••••		
St. Stephen, New Brunswick Smyrna	Feb.		3,000	.0			ļ <u>.</u>				•••••		••••		
Solingen	Feb. Feb.	5	300,000	57 18	ļ		1		3	•••••	•••••	••••••	ï		
Do	Feb.	4	43, 928 43, 928	21	•••••		•••••		2		•••••		1		
Southampton	de		103, 168	38		:			ĩ l		1	1 .			
South Shields	d	0	102, 312	55					1				2		
Stettin	Jan.	28	153,000	49	•••••					1 .		·····.	••••		
Do	Feb.	11	153,000	60	•••••	ļ	•••••						••••		
Stockholm Stuttgart		0	283, 550	144	•••••	•••••		•••••	1	6	5	1	••••		
Do	Feb. Feb.	9	162, 934 162, 934	64 50	•••••		•••••		•••••	•••••	••••• •	•••••	••••		
	de	10	120,000	ii	••••			•••••		•••••		••••	• •••		
Trapani	Feb.	11	45, 095	19									••••		
Trieste	Jan.	28	165,000	107	•••••				2	2 1	3 .				
Do	Feb.	4	165,000	108					1	1	2 .		••••		
Do	Feb.	11	165,000	85	•••••				1	4 .			••••		
Venice	dc		169, 883	104	•••••		•••••				2	5	1		
Vera Cruz	Feb.		30,000	38 245	•••••	•••••	•••••	<u></u>	•••••	<u></u> .	··•	·····	••••		
Warsaw Windsor, Nova Scotia	Feb. :	25	601, 408 3, 000	245	•••••	•••••		2	•••••	3	3	2	2		
	dc		49,000						•••••		1	••••	••••		
	Feb.	4	163, 042	50							.		••••		
	- 0~.				• ••••								••••		

a Beriberi, 2.

By authority of the Secretary of the Treasury:

WALTER WYMAN,